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Pomona College Bulletin

Announcement of Courses
1929-1930

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MARCH, 1929

No. 2

Announcement for 1929-1930

1929

1930

JULY							OCTOBER							JANUARY							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
....	1	2	3	4	5	6	....	1	2	3	4	5	....	....	1	2	3	4	....	....	....	1	2	3	4	5	
7	8	9	10	11	12	13	6	7	8	9	10	11	12	5	6	7	8	9	10	11	6	7	8	9	10	11	12
14	15	16	17	18	19	20	13	14	15	16	17	18	19	12	13	14	15	16	17	18	13	14	15	16	17	18	19
21	22	23	24	25	26	27	20	21	22	23	24	25	26	19	20	21	22	23	24	25	20	21	22	23	24	25	26
28	29	30	31	....	....	....	27	28	29	30	31	....	....	26	27	28	29	30	31	....	27	28	29	30	....	....	....
AUGUST							NOVEMBER							FEBRUARY							MAY						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
....	....	....	....	1	2	3	....	....	....	....	1	2	....	....	....	....	....	....	1	....	....	....	....	1	2	3	....
4	5	6	7	8	9	10	3	4	5	6	7	8	9	2	3	4	5	6	7	8	4	5	6	7	8	9	10
11	12	13	14	15	16	17	10	11	12	13	14	15	16	9	10	11	12	13	14	15	11	12	13	14	15	16	17
18	19	20	21	22	23	24	17	18	19	20	21	22	23	16	17	18	19	20	21	22	18	19	20	21	22	23	24
25	26	27	28	29	30	31	24	25	26	27	28	29	30	23	24	25	26	27	28	....	25	26	27	28	29	30	31
SEPTEMBER							DECEMBER							MARCH							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	....	....	....	....	....	1	1	1	2	3	4	5	6	7
8	9	10	11	12	13	14	8	9	10	11	12	13	14	2	3	4	5	6	7	8	8	9	10	11	12	13	14
15	16	17	18	19	20	21	15	16	17	18	19	20	21	9	10	11	12	13	14	15	15	16	17	18	19	20	21
22	23	24	25	26	27	28	22	23	24	25	26	27	28	16	17	18	19	20	21	22	22	23	24	25	26	27	28
29	30	....	....	....	....	....	29	30	31	....	....	....	....	23	24	25	26	27	28	29	29	30	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	30	31	....	....	....	....	....	....	....	....	....	....	....	....

COLLEGE CALENDAR

1929

<i>September 18, Wednesday</i>	}	Registration Days for First Semester.
<i>September 19, Thursday</i>		
<i>September 20, Friday</i>		Convocation, 9:00 a. m.
<i>September 20, Friday</i>		First Semester Classes begin, 10:15 a. m.
<i>November 27, Wednesday</i>		Thanksgiving Recess begins, 4:05 p. m.
<i>December 2, Monday</i>		Thanksgiving Recess ends, 7:30 a. m.
<i>December 20, Friday</i>		Christmas Recess begins, 4:05 p. m.

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<i>January 6, Monday</i>	Christmas Recess ends, 7:30 a. m.
<i>February 1, Saturday</i>	First Semester ends.
<i>February 3, Monday</i>	Registration Day for Underclassmen and Specials.
<i>February 4, Tuesday</i>	Registration Day for Upperclassmen.
<i>February 5, Wednesday</i>	Second Semester Classes begin, 7:30 a. m.
<i>April 4, Friday</i>	Spring Recess begins, 4:05 p. m.
<i>April 15, Tuesday</i>	Spring Recess ends, 7:30 a. m.
<i>June 16, Monday</i>	Commencement.

BOARD OF TRUSTEES

GEORGE W. MARSTON, LL.D.	<i>President</i>
ELI P. CLARK	<i>Vice-President</i>
FRANK H. HARWOOD	<i>Vice-President</i>
ERNEST E. JONES	<i>Secretary and Treasurer</i>
CHARLES K. EDMUNDS, PH.D.	<i>President of the College</i>
GEORGE S. SUMNER, PH.D.	<i>Controller</i>

HONORARY TRUSTEES

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Term of Office Expires June, 1929

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Term of Office Expires June, 1930

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Term of Office Expires June, 1931

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RALPH J. REED	Los Angeles
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BUTLER A. WOODFORD	Claremont

Term of Office Expires June, 1932

ARTHUR S. BENT	Los Angeles
GEORGE L. EASTMAN	Hollywood
EDWIN F. HAHN	Pasadena
HARVEY S. MUDD	Los Angeles
JOHN TREANOR	Los Angeles

Term of Office Expires June, 1933

SUSANNA BIXBY BRYANT	Los Angeles
ARTHUR M. DOLE	Pomona
CHARLES K. EDMUNDS, PH.D.	Claremont
WILLIAM S. MASON	Evanston, Ill.
DELL A. SCHWEITZER	Los Angeles
JOSIAH SIBLEY, D.D.	Pasadena

FACULTY¹

- CHARLES KEYSER EDMUNDS** 345 College Ave.
President, 1928
 B.A., Johns Hopkins University; Ph.D., Johns Hopkins University.
- CYRUS GRANDISON BALDWIN** Palo Alto
President Emeritus, 1890.
 B.A., Oberlin College; M.A., Oberlin College. Student, Andover Theological Seminary; D.D., Oberlin College.
- EDWIN CLARENCE NORTON** 145 W. Seventh St.
Dean of the Faculty and Professor of the Greek Language and Literature on the Edwin Clarence Norton Foundation, Emeritus, 1888.
 B.A., Amherst College; M.A., Amherst College and Yale University; Ph.D., Carleton College; D.D., Pacific Theological Seminary. Graduate Student, Johns Hopkins, Columbia and Oxford Universities.
- FRANK PARKHURST BRACKETT** 270 E. Third St.
Chairman of the Faculty, Professor of Astronomy on the Frank Parkhurst Brackett Foundation and Director of the Observatory, 1888.
 B.A., Dartmouth College; M.A., Dartmouth College; Sc.D., Dartmouth College. Honorary Fellow, Clark University.
- PHEBE ESTELLE SPALDING** 261 W. Fifth St.
Professor of English Literature on the Phebe Estelle Spalding Foundation, Emeritus, 1889.
 B.L., Carleton College; M.L., Carleton College; Ph.D., Boston University.
- GEORGE GALE HITCHCOCK** 721 College Ave.
Professor of Physics, 1892.
 B.A., University of Nebraska. Graduate Student, Johns Hopkins and Cornell Universities.
- GRACE ELLA BERRY** 353 W. Eleventh St.
Associate Professor Mathematics, 1909.
Dean of Women, 1909-1927.
 B.S., Mount Holyoke College; M.A., Mount Holyoke College.
- MILTON ERASTUS CHURCHILL** 507 Yale Ave.
Editor of College Publications, 1902.
 B.A., Knox College; M.A., Knox College; Litt.D., Knox College; B.D., Yale University. Graduate Student, University of Leipzig.

¹Arranged in order of appointment to present rank. The date in each case denotes the beginning of original term of service.

- MENDAL GARBUTT FRAMPTON** 927 Harvard Ave.
Professor of the English Language, 1904.
 B.A., Illinois College; M.A., Illinois College; M.A., Harvard University. Graduate Student, Harvard and Chicago Universities.
- CHARLES GRACCHUS NEELY** 739 College Ave.
Professor of Constitutional History and Law on the Daniel Herbert Colcord Foundation, Emeritus, 1911.
 B.L., University of Illinois.
- WILLIAM ATWOOD HILTON** 1293 Dartmouth Ave.
Professor of Zoology on the Willard George Halstead Foundation, 1905.
 B.S., Cornell University; Ph.D., Cornell University.
- ROBERT DAY WILLIAMS** Mills Ave. N. of Mesa Ave.
Professor of Experimental Psychology, 1909.
 B.S., Pomona College; M.A., Yale University; Ph.D., Yale University. Graduate Student, University of California.
- BERNARD CAPEN EWER¹** 706 Indian Hill Blvd.
Professor of Psychology, 1916.
 B.A., Brown University; M.A., Brown University; Ph.D., Harvard University.
- RALPH HAINE LYMAN** 357 W. Tenth St.
Professor of Applied Music, Head of Department of Music, 1917.
 B.A., Grinnell College. Student in voice with Karleton Hackett, William B. Olds, Grant Hadley, Arthur Middleton, Courtland Cooper, Holmes Cowper and other American masters and with Vittorino Moratti in Berlin.
- MARO BEATH JONES** 125 W. Eleventh St.
Professor of Romanic Languages, 1911.
 B.A., Boston University; M.A., Boston University. Graduate Student, Universities of Chicago, Geneva and Barcelona. Student Estudis Universitaris Catalans, Barcelona.
- WILLIAM EVAN NICHOLL** 465 W. Sixth St.
Dean of the College and Assistant Professor of Education, 1919.
 B.A., Bellevue College; M.A., Columbia University. Graduate Student, Edinburgh University.
- HOMER ELMER ROBBINS** 487 Harrison Ave.
Professor of Classical History and Language, 1915.
 B.A., University of Michigan; M.A., University of Michigan; Ph.D., University of Michigan. Graduate Student and holder of University and Buhl Classical Fellowships, University of Michigan.

¹Absent on leave, 1929-1930.

- ROBERT CHARLES DENISON 232 W. Fifth St.
Professor of Philosophy, 1920.
 B.A., Amherst College; B.D., Andover Theological Seminary;
 D.D., Amherst College.
- RAYMOND CUMMINGS BROOKS 489 W. Sixth St.
Professor of Religion on the Nancy M. Lyon Foundation,
1921.
 B.A., Tabor College; B.D., Yale Divinity School; D.D., Tabor
 College and Whitman College. Graduate Student, Oberlin College.
- BRUCE McCULLEY 236 College Ave.
Professor of English Literature, 1921.
 B.A., Hiram College; M.A., University of Chicago; Ph.D., Harvard
 University.
- WILLIAM KIRK 705 Indian Hill Blvd.
Professor of Social Economics on the Henry Snyder Foun-
dation, 1922.
 B.A., Johns Hopkins University; Ph.D., Johns Hopkins University.
- WILLIAM POLK RUSSELL 506 E. Sixth St.
Professor of Mathematics on the Joseph W. Fiske Foun-
dation, 1904.
 B.A., Cumberland University; M.A., Cumberland University.
 Graduate Student, Columbia, Harvard and Yale Universities.
- GEORGE SAMUEL BURGESS 154 E. Tenth St.
Professor of Law, Secretary of the Faculty and Director
of the Summer Session, 1918.
 B.A., University of Michigan; J.D., University of Michigan.
- EUGENE WHITE NIXON 1034 Harvard Ave.
Professor of Physical Education for Men, 1916.
 B.A., Monmouth College. Graduate Student, Illinois, California
 and Columbia Universities.
- FRANK WESLEY PITMAN 116 E. Twelfth St.
Professor of History, 1924.
 Ph.B., Yale University; M.A., Yale University; Ph.D., Yale Uni-
 versity.
- ROLAND R. TILESTON 1129 Dartmouth Ave.
Professor of Physics, 1925.
 B.A., Dartmouth College; M.A., Dartmouth College; D.Sc., Colo-
 rado College.
- RUSSELL McCULLOCH STORY 127 W. Eighth St.
Professor of Political Science, 1925.
 B.A., Monmouth College; M.A., Harvard University; Ph.D., Har-
 vard University.

- CHARLES TABOR FITTS 826 Harvard Ave.
Registrar and Assistant Professor of English, 1919.
 B.A., Amherst College; M.A., University of California. Graduate Student, Harvard University.
- WILLIS HOLMES KERR 470 W. Seventh St.
Librarian, 1925.
 B.A., Bellevue College; M.A., Columbia University. Graduate Student, Edinburgh University.
- PHILIP ALEXANDER MUNZ 1165 Indian Hill Blvd.
Professor of Botany on the Henry Kirke White Bent Foundation, 1917.
 B.A., University of Denver; M.A., University of Denver; Ph.D., Cornell University. Graduate Student, University of Chicago.
- KENNETH DUNCAN 1120 Harvard Ave.
Professor of Economics on the Stedman-Sumner Foundation, 1926.
 B.A., Wabash College; M.A., University of Wisconsin; Ph.D., University of Michigan.
- GEORGE A. SANFORD 438 W. Twelfth St.
Professor of Military Science, 1926.
 B.A., Kenyon College. Major, Infantry, U. S. Army.
- ALFRED OSWALD WOODFORD 443 W. Tenth St.
Professor of Geology, 1915.
 B.A., Pomona College; Ph.D., University of California.
- JESSIE EDITH GIBSON 860 Dartmouth Ave.
Dean of Women on the Martha N. Hathaway Foundation, 1927.
 B.A., University of Idaho; M.A., University of Washington. Graduate Student, California and Columbia Universities.
- CHARLES JUDSON ROBINSON 809 Indian Hill Blvd.
Professor of Chemistry, 1927.
 B.S., Illinois Wesleyan University; Ph.D., Johns Hopkins University.
- EDWARD TAYLOR 1022 Harvard Ave.
Professor of Engineering Mathematics, 1920.
 C.E., University of Minnesota; M.A., University of Southern California. Graduate Student, University of Oregon.
- JOSEPH PIJOAN Cor. Via Zurita and Via La Selva
Adjunct Professor of Hispanic Civilization and Lecturer on the History of Art, 1924.
 Lic. Architecture and Letters, University of Barcelona. Student, University of Rome.
- EDWARD MCCHESENEY SAIT
Adjunct Professor of Political Science, 1928.
 B.A., Toronto University; M.A., Toronto University; Ph.D., Columbia University.

- WALTER ALFRED ALLEN 272 E. Second St.
Associate Professor of Musical Theory and Appreciation, and Instructor in Organ, 1912.
 B.A., Beloit College; B.Mus., Yale University. Associate, American Guild of Organists.
- EVERETT SAMUEL OLIVE 136 W. Seventh St.
Associate Professor of Piano, 1923.
 B.Mus., Simpson College. Graduate Student, Simpson College. Pupil of Moritz Mayer-Mahr and Mme. Teresa Carreno in Berlin.
- ELLIOTT CURTIS LINCOLN 365 E. Eighth St.
Associate Professor of English Literature, 1924.
 B.A., Colby College; M.A., State College of Washington and Harvard University.
- BENJAMIN DAVID SCOTT¹ 828 College Ave.
Associate Professor of Public Address, 1923.
 B.A., University of Southern California; S.T.B., Boston University; Ph.D., Boston University. Graduate work, Boston, Brown and Harvard Universities.
- JOSEPH WADDELL CLOKEY Via Los Altos
Associate Professor of Organ, 1926.
 B.A., Miami University. Graduate, Cincinnati Conservatory of Music.
- DIETRICH NEUFELD 807 College Ave.
Associate Professor of German, 1928.
 Ph.D., University of Jena.
- ELIZABETH KELLEY 157 E. Tenth St.
Associate Professor of Physical Education for Women, 1928.
 B.A., University of Wisconsin; M.A., New York University.
- WALTER T. WHITNEY
Associate Professor of Astronomy, 1929.
 B.S., M.S., Pomona College; Ph.D., University of Chicago.
- JAMES W. CROWELL
Associate Professor of Spanish, 1929.
 B.S., Haverford College; M.A., Haverford College. Graduate Student, Cornell University.
- ROBERT TRESILIAN BELCHER 452 W. Sixth St.
Assistant Professor of Mathematics and Engineering, Emeritus, 1907.
 B.A., Queen's University. Graduate Student, Queen's College and University of California.

¹Absent on leave, first semester, 1929-1930.

CLIFFORD NOTT HAND 1045 Yale Ave.
Assistant Professor of Religion and Editor of College Magazine, 1919.

B.L., Pomona College; B.D., Pacific School of Religion; M.A., University of Southern California. Graduate Student, University of California.

ARTHUR BABCOCK 1133 Yale Ave.
Assistant Professor of Singing, 1921.

Graduate of the New England Conservatory of Music. Member of faculty of the New England Conservatory of Music. Pupil of Sbriglia, in Paris.

RALPH RAYMOND UNIACKE 160 W. Eleventh St.
Assistant Professor of Violin, 1923.
Pupil of Franz Milcke.

MARY BROOKS EYRE 246 Dartmouth Ave.
Assistant Professor of Psychology, 1924.
B.A., Stanford University; M.A., Stanford University.

REGINALD R. BACON 480 Alexander Ave.
Assistant Professor of Military Science and Tactics, 1927.
B.S., Agricultural College of Utah. Captain, U. S. Army.

WILLIAM HENRY COOKE 226 W. Eighth St.
Assistant Professor of History, 1927.
B.A., Pomona College; M.A., Pomona College; Ph.D., Stanford University.

ROGER WILLIAMS TRUESDAIL 430 W. Sixth St.
Assistant Professor of Chemistry, 1927.
B.A., University of Redlands; M.S., University of Oregon; Ph.D., University of Washington.

PAUL LUTHER KARL GROSS 709 College Ave.
Assistant Professor of Chemistry, 1926.
B.S., University of Chicago; M.S., University of Chicago; Ph.D., University of Chicago.

FRANCIS GARRITT GILCHRIST 346 Harvard Ave.
Assistant Professor of Zoology, 1924.
B.A., University of California; Ph.D., University of California.

COLVIN HEATH 270 W. Twelfth St.
Assistant Professor of Physical Education for Men, 1922.
B.A., Pomona College. Graduate Student, Pomona College.

ROBERT LOBINGIER STREHLE 1019 Dartmouth Ave.
Assistant Professor of Physical Education for Men, 1923.
B.A., Pomona College. Graduate Student, Pomona College.

- FRANCIS RAYMOND IREDELL 120 E. Eleventh St.
Assistant Professor of Philosophy, 1925.
 B.A., Pomona College; M.A., Harvard University.
- MARY D. BIGELOW Miramar and Mills Aves.
Assistant Professor of Physical Education for Women, 1925.
 Graduate, Department of Hygiene, Wellesley College.
- MABLE CLAIR WEST 460 W. Tenth St.
Instructor in Piano, 1905.
 B.S., Pomona College. Graduate Student, Peabody Conservatory
 of Music, Baltimore. Pupil of Ernest Hutcheson.
- ROSA FRIEDA BISSIRI 256 W. Sixth St.
Instructor in French, 1920.
 B.A., Kreuzlingen College, Switzerland.
- MARION JEANETTE EWING 487 W. Sixth St.
Assistant Librarian, 1912.
 B.A., Olivet College; B.S., Simmons College; M.A., Boston University.
- MARGARET HUSSON Maryland Ave.
Instructor in Spanish, 1925.
 B.A., University of Kansas; M.A., Columbia University.
- EARL JAY MERRITT Smiley Hall
*Instructor in Physical Education, and Freshman Class
 Adviser, 1925.*
 B.A., Pomona College.
- JAY PLOWE 1403 Alta Vista, Los Angeles
Instructor in Flute, 1925.
- MARJORIE CARVER WEIRICK 1704 La Senda Pl., So. Pasadena
Instructor in Cello, 1925.
 B.S., Pomona College. Graduate, Institute of Musical Art. Pupil
 of Hans Willeke in New York.
- THOMAS MONTAGUE BEGGS 1250 Amherst Ave.
Instructor in Art, 1926.
 B.F.A., Yale University. Graduate, General Art Course at Pratt
 Institute.
- HAROLD DAVIS 248 E. Twelfth St.
Instructor in English, 1927.
 B.A., Stanford University; B.A. and B.Litt., Oxford University.
- JESSE JOSEPH COLEMAN 870 N. Towne Ave., Pomona
Instructor in Public School Music, 1927.
 B. Mus., Chicago University. Pupil of Percy Rector Stephens and
 DeWitt Durgin Lash.

RAMSAY LORD HARRIS 1102 College Ave.
Instructor in English, 1927.

B.A., Colgate University; Graduate student, Rochester Theological Seminary, Universities of Rochester, Redlands and Southern California.

HATTIE C. MCCONNAUGHEY 260 E. Seventh St.
Cataloger, 1924.

B.A., Hillsdale College; B.Pd., Hillsdale College; Graduate Student, University of Michigan and Pomona College.

MARY CAROLINE BLAISDELL 159 W. Seventh St.
Instructor in Dramatics, 1927.

B.A., Pomona College; M.A., George Washington University.

NORMAN THEODORE NESS 490 W. Central Ave.
Instructor in Economics, 1928.

B.A., Carleton College; M.A., University of California.

EMILIE ELIZABETH WAGNER 256 W. Seventh St.
Instructor in German, 1928.

B.A., Smith College; M.A., Pennsylvania State College. Graduate Student, Columbia University, Middlebury College, Sorbonne, Université de Paris.

BERNICE VAN GELDER 127 E. Twelfth St.
Instructor in Physical Education for Women, 1928.

B.S., University of Wisconsin.

A. MURRAY FOWLER
Instructor in English, 1929.
B.A., University of Minnesota; M. A., University of Oregon.

JOSEPH W. HAWTHORNE
Instructor in Psychology, 1929.
M.A., University of Southern California. Graduate Student, University of Chicago.

MARY C. LOVE
Head of Library Loan Department, 1929.
B.A., M.A., Stanford University.

WALTER H. FREDERICK
Instructor in Band Music, 1929.
B.Mus., Oberlin College.

FREDERICK TIPPING
Instructor in Piano, 1929.
Associate of London College of Music.

ROBERT TROWBRIDGE ROSS¹
Instructor in Public Address, 1929.
B.S., California Institute of Technology.

¹First semester, 1929-1930.

DEPARTMENTAL LECTURERS

AUBREY AUGUSTUS DOUGLASS

275 W. Tenth St.

Lecturer in Education, 1926.

Professor of Education, Claremont Colleges.

B.A., Kansas State Teachers College; M.A., Ph.D., Clark University.

HORACE JEREMIAH VOORHIS

San Dimas

Lecturer in History, 1929.

B.A., Yale University; M.A., Claremont Colleges.

ASSISTANTS

PAUL WHISTLER

Assistant in Physics.

ELIZABETH CROW

Graduate Assistant in Botany.

B.A., Pomona College.

HELEN GREEN

Graduate Assistant in Zoology.

DOROTHY HOLVERSON

Graduate Assistant in English.

B.A., Pomona College.

ELIZABETH PELTER

Graduate Assistant in Physical Education for Women.

ROBERT ROSS

Graduate Assistant in Public Address, second semester.

B.S., California Institute of Technology.

LAWRENCE WHITE

Graduate Assistant in Sociology.

GORDON WILSON

Graduate Assistant in Classical History and Language.

B.A., Pomona College.

ADMISSION

GENERAL REQUIREMENTS AND METHODS OF ADMISSION

It is the purpose of Pomona College to do a distinctly high grade of work, thus preparing its graduates for special distinction in whatever later callings they may choose. To this end candidates for admission to any class must present satisfactory evidence of their fitness for college, both in character and in scholarship. Testimonials of character and a letter of honorable dismissal from the last institution attended are required.

It is further advised that application be made as early as possible, inasmuch as the College cannot under present conditions guarantee the admission of more than two hundred to the freshman class, the trustees having limited the total attendance to eight hundred.

The College welcomes tentative application from prospective freshmen several years in advance and is glad to offer suggestions from time to time regarding the best preparation for admission. In this respect the good offices of the College are freely at the service of all interested inquirers. Formal applications should be accompanied by a fee of two dollars and fifty cents. A medical examination conducted by an authorized physician, under the direction of the College, is required of all students.

An applicant for admission, immediately upon receipt of notification of acceptance, is required to make a deposit of twenty-five dollars on the tuition of the first semester.

ADMISSION TO FRESHMAN STANDING

Applicants are admitted to freshman standing in any one of three ways, as follows:

First: Examination by the College.

Second: Certificate of the College Entrance Examination Board.

Examinations are given by the College Entrance Examination Board at certain times and places, which may be learned from the Registrar or from principals of secondary schools.

Third: Certificate from approved schools or colleges.

Students from approved schools or colleges are admitted without examination on presentation of a certificate signed by the principal or proper official and showing in detail the requisite completed courses. Certificate blanks obtained from the principal should be filled out and returned as early as possible after the completion of the high school year.

ENTRANCE UNITS

Fifteen units of recommended work is the normal requirement for admission. In rare cases an applicant offering twelve recommended units, supplemented by special recommendations of principals and references and by scholastic aptitude tests of a quality indicative of ability to do college work with success, may be accepted.

A "unit" represents a course of study in one subject of high school grade involving five forty-five minute recitations per week or an equivalent for a school year. Laboratory periods should be at least twice the length of recitation periods.

Not less than one unit in any subject is normally accepted, though a half unit may be accepted when accompanied by units for courses in allied subjects.

ENTRANCE SUBJECT REQUIRED

English, 3 units.

ENTRANCE SUBJECTS RECOMMENDED

Although English is the only subject specifically required, applicants will find it to their advantage to present the following as part of the fifteen units required: at least 2 units of one foreign language; 1 unit each of history, algebra, geometry, and laboratory science; and 3 or more units of electives from the following subjects, English, foreign language, history, mathematics, and laboratory science.

Those are matriculated to full standing who at the end of a semester's residence meet the requirements (*see* Matriculation); those who do not meet the requirements are not allowed to matriculate and are enrolled as in partial standing. No student in partial standing is recommended to college standing in another institution. The final acceptance of entrance units is based upon the character of the work done in class at Pomona College as well as upon the grade of the units presented.

Students who have sufficient credit from other institutions are admitted to advanced standing on credentials signed by the proper officials and giving full specifications concerning the nature of the courses taken and the time spent in each, together with their rank in each subject. They are assigned hours and credits on the basis of their credentials, but such assignment is provisional until ratified by the Classification Committee. This ratification is not given until after the required semester's residence, at which time the Committee has power to act in adjusting hours or credits, or both, to the qualifications shown.

ADMISSION AS SPECIAL STUDENTS

Mature students, ordinarily only such as are at least twenty-one years of age, may be admitted as special students to courses for which, by ability and preparation, they may be fitted. This provision applies particularly to those equipped for advanced studies in special departments. The privilege of classification as special students is not open to those who seek admission to College in this way as a means of avoiding compliance with the entrance or collegiate requirements laid down for regular students. Special students are not candidates for a degree.

Credit, varying in amount with the individual courses, is granted for graduate work in approved High Schools.

REGISTRATION

All students are required to register on one of the regularly announced days of registration preceding the opening of the class

work of each semester. A fee of two dollars is charged for later registration and a payment of one dollar for any change in the list of subjects chosen. This latter payment is remitted in the case of new students registering for the first time, provided the changes are made within a week of the opening day of the registration period.

Students are admitted to those courses only for which they are formally registered.

Students are not received later than the last day set for change of schedule.

MATRICULATION

Matriculation implies the meeting of all entrance requirements and the proven ability to carry college work. To this end the standing of all new students is provisional until after they have been in residence for one semester. At that time those are matriculated who have shown themselves in accord with the spirit of the College, who have done a satisfactory quality of work during their semester of residence and whose entrance units are acceptable.

Students are not candidates for a degree nor are they eligible for recommendation to college standing in another institution until they have matriculated. Students are matriculated only after they have come into full standing. All students must be matriculated before attaining to Junior standing.

ELECTION OF COURSES

On or before the first Saturday in January after the Christmas recess, and the first Saturday in June, all resident students must fill out a schedule listing their choice of subjects for the following semester.

Changes from this schedule may be made upon the payment of a fee of one dollar. Failure to prepare such a schedule at the appointed time subjects the student to a fee of two dollars. Students may not elect less than twelve hours of work without the special permission of the Classification Committee.

HONORS

The four-year course offered by the College leads, as a rule, to the bachelor's degree in ordinary, or *rite*. Students of ability are invited to undertake the achievement of the degree with honors. The honors offered by the College are of two classes and the programs leading to them are correspondingly of two types. In case of each, however, the premium is given to initiative, originality and independence of thought.

By the end of his freshman year each student is required to choose between candidacy for the degree in ordinary and candidacy for the degree with honors. (Students in ordinary who wish to change to the rating of honors students after the beginning of the sophomore year are permitted to do so, provided that their showing in scholarship is sufficiently good to gain the approval of the Honors Committee, which has charge of the entire matter. Also, honors students who fail to maintain the grade of scholarship demanded by the Honors Committee will be demoted to the rating in ordinary.) The basic idea is that of enlisting the initiative, and consequently the full power, of the student in the enter-

prise of his own education. The honors student is permitted to register for twelve hours each semester in place of the standard fifteen, the higher *quality* of his achievement being regarded as a sufficient offset for the reduced *quantity* when counted toward the total requirement (126 hours) for graduation. He is given greater freedom and is invited into especially close relations with his teachers. He is one to whom much is given and of whom much is expected. If, and when, he completes his collegiate program to the satisfaction of the Honors Committee, under whose supervision he works, he receives from the College his degree *cum laude*, *magna cum laude*, or *summa cum laude*, the measure of honor given being dependent on the merits of his case.

To the student of unusual ability there is extended at the beginning and at the middle of his junior year the additional privilege of "reading for honors" in the field of his special interest under the personal direction of a professor of his own choosing; the arrangement being one of mutual agreement, the initiative coming from either side, supervision of the entire matter resting with the Honors Committee. Here again, there is a reduction in the *quantity* of the student's program for the sake of *quality*, and a very great increase in the freedom accorded the student and in the intimacy of relationship with his teachers. Candidates who pursue this special type of program with satisfaction to the Committee are graduated with Honors or High Honors in their respective fields of specialization, the measure of honor again being dependent on the merits of each case.

For more detailed information regarding these two types of programs leading to honors at graduation students are referred to a special statement published as a pamphlet by the Honors Committee.

LIVING CONDITIONS

It is assumed that, as far as possible, students will room at the College residence halls and board at the College dining-rooms. Any other arrangement for room or board must have the approval of the proper Dean. Lists of approved rooms for men are kept at the office of the Dean of the College; for women, at the office of the Dean of Women. All rooms in the College residence halls are rented for the College year. Unless there is a written agreement to the contrary, it is assumed that rooms in private houses are rented for one semester. Change of rooms is made only by permission of the Deans.

The College maintains and operates three dormitories, one cottage, two dining halls and a cafeteria.

A deposit of \$10.00 is necessary to secure a room and should accompany the application for the room. This amount is retained as a breakage fee, from which deductions will be made for individual and communal damages to the building, the balance being returned at the end of the year. Rooms are assigned to new students in order of application.

RESIDENCE HALLS FOR MEN

Smiley Hall has both single and double rooms and suites of three rooms accommodating two students. Each occupant pays \$100.00 for the College year.

Eli P. Clark Residence Hall for Freshman Men. Accommodations in this hall include dormitory and dining room privileges and are rented only on the basis of an inclusive yearly charge for both board and room, the rate varying from \$475 to \$550. All Freshman men except those actually living at home with their parents are required to reside in this dormitory and take their meals in the dining hall.

RESIDENCE HALLS FOR WOMEN

Harwood Court has both single and double rooms, as well as suites for two or three students. For each individual the charge is ordinarily \$150.00 for the College year. In a few cases rooms are \$130.00 each, if occupied by two students; \$200.00 if occupied by one.

All Freshman women unless actually living at home with their parents are required to live in Harwood Court and all women of whatever class occupying College residence halls are expected to board in the Women's dining room of the Claremont Inn, in which the boarding rate is approximately \$270.00 per year.

Haddon Hall, a cottage housing 13 women. Each student pays on an average \$150.00 per year according to accommodations.

Students who are not provided for in College residence halls or dining halls may find accommodations in private homes in the town of Claremont. The charges for these private accommodations vary, but are approximately the same as those made by the College.

TUITION

GENERAL CHARGES

Regular tuition, including all general privileges, Music and Drama Course Ticket, Library privileges, etc., per semester	\$150.00
Tuition for students carrying less than twelve hours of work, for each such hour, per semester exclusive of above general privileges	12.50
Laboratory fees as stated after description of courses.	

CHARGES IN MUSIC

For those paying regular tuition:

For one-half hour private lesson in music per week, per semester	\$ 45.00
For each half-hour private lesson in excess of one per week, per semester	40.00
For those carrying less than twelve hours of college work, exclusive of work in music:	
For one-half hour private lesson in music per week, per semester	60.00
For each half-hour private lesson in excess of one, per semester	40.00
Dues for Associated Students, per semester.....	3.00

This charge is made upon all regular students by action of the Associated Student Body. Recognizing the value of the activities supported by this fee, the College requires its payment and reserves the right to approve the budget for which it is spent:

CURRICULUM

DEGREE OF BACHELOR OF ARTS

The courses of study offered lead to the degree of Bachelor of Arts under the following hour and credit requirements.

HOOR REQUIREMENTS

One hundred and twenty-six hours of work are required for graduation. An "hour" consists of one recitation or lecture period, or one laboratory period a week for one semester. A recitation or lecture period covers fifty minutes; a laboratory period covers, in general, the time of three such periods. In order to complete the course in four years one must take an average of fifteen hours of academic work per semester throughout the four years.

CREDIT REQUIREMENTS

In order to graduate a student must not only earn a certain number of hours, but also attain an average of at least C grade in those hours. To this end a certain number of credits is ascribed to each grade as a basis of determining average grade. The scale is so adjusted that the number of credits required for graduation coincides with the number of hours. Details regarding credits are published in *The Manual of Procedure*.

CHOICE OF SUBJECTS

In the selection of his work the student is given a large range. The only limitations are such as will insure to him, on the one hand, the breadth of view which may be gained by an introductory study of each of the great realms of knowledge; and, on the other, that concentration along some chosen line of work which shall develop power of thought and an actual fund of knowledge in some particular field. To this end the following general requirements for graduation have been approved.

GENERAL REQUIREMENTS FOR GRADUATION

I. FOR THE LOWER DIVISION

1. Four hours of Physical Education (Activities).
Note: For two of these hours work in Military Science may be substituted.
2. At least one course (two semesters) in each of five of the following divisions (I-VII), no one of the groups (A,B,C) to be passed over.

Group A.

- Division I. Art; Music (Theory and Appreciation).
- II. English; Public Address.
- III. French; Italian; Spanish; German; Greek; Latin.

Group B.

- Division IV. Biology; Botany; Zoology.
- V. Mathematics; Chemistry; Physics; Astronomy; Geology.

Group C.

- Division VI. Economics; Education; History; Political Science and Law; Sociology.
- VII. Philosophy; Psychology; Religion.

3. Courses at student's choice in any of the above named departments, in Military Science, Hygiene (Physical Education A5); enough to make up a sum total of 64 hours.

II. FOR THE UPPER DIVISION

1. Two hours of Physical Education (Activities).
2. Sixty other hours, election subject to the following principles of distribution:
 - a. Each student shall complete during each semester of his Junior year at least one course (not less than 2 hours) in each of three of the following nine departmental groups:
 - I to VII, as above.
 - VIII, Physical Education.
 - IX, Military Science.
 - b. Each student shall complete for graduation not less than 36 hours of C and D work, at least 12 of which shall be of D rank.

These General Requirements are designed to protect the student against gross errors in shaping his collegiate program, especially during the Lower Division years; they intentionally leave him a great deal of freedom to shape his course of study according to his interest. In the exercise of this freedom it will be the part of wisdom for him to take advantage of the working organization of the curricular program into sequences of courses, departments and divisions, looking upon these things as aids of which he, as student, may avail himself in the process of securing an education. Courses, etc., are, however, merely aids toward, not substitutes for, reading, reflection and independent study.

THE PROGRAM OF STUDIES

To each student the College strongly recommends the shaping of a program of studies that will mean, (1) by the end of the Sophomore year, an intelligent orientation in as many as five of the great fields of learning corresponding to the "divisions" (I-VII) of the preceding statement of Requirements for Graduation, and (2) during the Junior and Senior years, a relative concentration of effort in some one of those fields, such a concentration as is needful for the effective organization of one's Collegiate program as a whole.

CONCENTRATION IN SPECIAL FIELDS

For the guidance of the student who wishes to work out a program of concentration in a particular field certain principles and methods of procedure have become established:

1. Lower Division Preparation: There must be sufficient Lower Division (A and B) work in the special field and in allied fields to ensure adequate preparation for carrying successfully the Upper Division work aimed at.

2. Upper Division Requirement: Not less than eighteen hours of Upper Division (C and D) work in the field of concentration; six of these eighteen hours must be of D rank, and six of them must be taken during the Senior year.

3. Foreign Language: For advanced work in most fields a reading knowledge of at least one modern foreign language is necessary—usually French or German; in some fields a command of both is most desirable. It is very much to the advantage of the student to acquire this reading knowledge before entering college.

4. Comprehensive Examination: In most divisions of the College the student's program of concentration culminates in a final "comprehensive examination" covering the entire field in which his concentration lies.

5. Adviser: That member of the faculty in whose field a student is working intensively becomes the student's official adviser during his Junior and Senior years. It will be well for the student to consult his prospective adviser even earlier in his course.

The application of these ideas involves to such a degree a recognition of differences between fields of learning and between the individualities of students that no summary statement of them should be thought of as complete. The attention of those interested in special fields is therefore directed to the following more extended presentations of the work of the respective divisions. In addition, certain pre-professional courses are also presented in outline for the benefit of students who look toward teaching, engineering, or medicine.

Most of the statements made in connection with concentration should be read as suggestions rather than as rigid regulations; the degree of emphasis attached to each such suggestion will be determined for the student by his adviser.

DIVISION I—FINE ARTS

(DEPARTMENTS OF ART AND MUSIC)

Courses in the history, appreciation, and theory of art and music are offered by the College as contributions to personal culture, and receive credit toward the Bachelor of Arts degree on the same basis as other academic courses. In the fields of applied music and art technical proficiency is aimed at, with the idea, first, of developing an appreciative taste, and second, of stimulating creative ideas worthy of expression.

APPLIED ART WORK: This is divided into two branches to meet the student's preference for Drawing and Painting, which look toward Fine Arts endeavors, or for Design and Crafts, which relate to the Industrial Arts and the home. In recognition of the interdependence of Design and Drawing as the basis of all art training, the fundamental courses in both subjects should be pursued early in the college course. Theory and History courses must be included with advanced work in either branch of Applied Art study.

The student will be expected to present his work in the Departmental Exhibition at the end of each year. Upon the completion of the third year of study the student will be expected to give a separate exhibition of his work of that year.

APPLIED MUSIC: The student may take music as a subject of concentration in his course leading to the Bachelor of Arts degree. In addition to this it is possible to meet the requirements of the State Board of Education for the State Certificate, which enables those recommended by the College to teach music in the public elementary and secondary schools of the State of California. The student, whether concentrating in music or working toward the music credential should take the beginning harmony and sight singing courses in his first year; otherwise he may have difficulty in completing the requisite courses in four years.

Each candidate for the General Secondary Certificate must give a satisfactory public recital in his major subject in Applied Music. Each candidate must also take at least two years of voice lessons (one lesson per week) and have the equivalent of four semester hours in either Band, Orchestra, Glee Clubs or Choirs. Cultural courses, especially languages, are strongly recommended.

The student in applied music will be enrolled for credit toward the Bachelor of Arts degree upon the written recommendation of the Head of the Department of Music. This recommendation is based upon a system of proficiency tests given before an examining committee of the music faculty. In addition, the work in applied music must be accompanied or preceded by first year harmony to receive credit. A second year or more of credit is possible when the applied music course is accompanied or preceded by second year harmony. A minimum of two half-hour lessons weekly is required. Proficiency tests are required only of students desiring credit toward the Bachelor of Arts degree.

DIVISION II—ENGLISH

(DEPARTMENTS OF ENGLISH AND PUBLIC ADDRESS)

A Program for the Guidance of Students Concentrating in English:

I. PREREQUISITES for undertaking concentration in English in the Upper Division:

1. A knowledge of Latin such as may reasonably be assumed from two high school years in the subject. (More than two years will prove necessary if specialization in English as a graduate student is planned).
2. A reading knowledge of French. (German will be accepted in substitution).
3. Proficiency in the use of English, whether oral or written; a measurable mastery of the fundamental principles of literary criticism and interpretation.
4. An intelligent acquaintance with the books of Reading List I.

II. THE MEASURE OF ACHIEVEMENT set up as a standard:

1. A general knowledge of the subject *English Literature*, with particular attention to major figures such as Chaucer, Spenser, Shakespeare and Milton, and a somewhat specialized knowledge of the English and American literature of the last two hundred years.
2. a. A general knowledge of English history—especially in its cultural aspects.
b. A knowledge of English geography, topography, etc., as *place* and *physical environment* in relation to literary men and their works.
3. Some understanding of the more significant movements in the field of philosophy, especially as they apply in the realms of literature and art.
4. An intelligent acquaintance with a share of the great books of the world, particularly with those appearing in Reading Lists I and II.
5. An average of B or better in divisional courses of C or D rank.

THE COMPREHENSIVE EXAMINATION: The success of the student in meeting the standard set up will be tested in a final Comprehensive Examination at the close of the Senior year.

III. A SUGGESTED COURSE for students proposing to concentrate in English:

Note: The same suggestions may be used by students wishing to emphasize English in some degree though not proposing to make that subject dominant in their collegiate programs.

LOWER DIVISION

Freshman Year		Sophomore Year	
	Hours		Hours
English A1.....	8	English B.....	6
History A1.....	6	History B7 ¹	6
French ²	6	French B ²	6
Biology A1.....	6	Philosophy B21 or B23.....	3
A Physical Science.....	6	Psychology B1.....	3
		Public Address B32 or B33.....	4

UPPER DIVISION

English C103, followed by English D215; Philosophy C125; Art C111. A second English course each year is recommended.

DIVISION III—FOREIGN LANGUAGES

(Departments of French, German, Greek, Italian, Latin
and Spanish)

GREEK AND LATIN

Courses in the Classical Languages are designed to give students a more adequate foundation in the technique of English and the Modern Languages, and thereby a better appreciation of their literature as well as an intimate acquaintance with the life and literature of the ancient Greeks and Romans.

Students with no preliminary work in Latin should elect course A1; those with two years preparatory work, A2; those with three years' preparatory work may, with the permission of the instructor, elect B3. Students with four years' training in secondary Latin regularly select B3, which includes types of the finest prose and poetry of Roman literature. Students eligible for more advanced work should choose their courses after consultation with the head of the department.

ROMANIC LANGUAGES

The student wishing to qualify for the teaching of French and Spanish should be fortified by a pre-knowledge of Latin and the taking in course of at least one year of Italian.

The normal sequence for the student without previous French or Spanish, but wishing to pursue Romance studies in college, would be to begin Spanish or French in the Freshman year (Fr. A1 or Sp. A21) and the other in the Sophomore year, following with Italian in the Junior year (unless the specialty is to be Italian, in which case it should be begun in the Sophomore year, in order to complete the full three years of that language).

For specialists in Romanic Languages a reading knowledge of German is quite necessary.

GERMAN

In German the cultural aspects of the subject are stressed, with special attention to studies of German civilization as represented in

¹If another Social Science, as Economics B1 or Sociology B21, is substituted, then History B7 should be taken in the Junior year.

²If a reading knowledge of French has already been acquired, then German may very well be substituted.

the best works of literature. No emphasis is laid upon "scientific German" as such, as the successful following of German works in Philosophy, Art and Science will cover that phase, except for the technical vocabulary involved in the particular subject under consideration.

DIVISION IV—BIOLOGICAL SCIENCES

(Departments of Biology, Botany and Zoology)

I. OPPORTUNITIES.

The location of Pomona College, close to mountain, desert, coastal plain and sea, makes it especially suited to studies of systematic and ecological nature. This assures also an adequate and diversified supply of materials for class and laboratory and for special problems of a morphological or physiological nature. The College, furthermore, possesses a number of special biological collections, notably of plants and of insects. The Marine Laboratory of the College at Laguna Beach is an adjunct valuable during the summer session and of use on occasion throughout the year.

II. CONCENTRATION IN THE DIVISION.

A student emphasizing biological science is ordinarily expected to have Biology A1, Botany B21, and Zoology B11, 12 (or their equivalents), followed by an integrated program in either Botany or Zoology or both. Those concentrating in this division are expected to participate in a non-credit bearing conference looking toward a comprehensive examination at graduation. A reading knowledge of German and French and a training in the physical sciences are also expected according to the needs of the individual.

III. COURSES PREPARATORY TO:

(1). Graduate work, looking towards investigation or higher education. Broad foundations in the biological and physical sciences, with liberal selections of advanced courses in the field of concentration, are essential for those who anticipate professional work in biological science.

(2). Teaching in secondary schools. Teachers of biological subjects and general science need basic courses in as many branches of science as possible. The following are also important: Plant Physiology and Taxonomy, Human Body, Entomology, Advanced Zoology, Genetics and Bionomics.

(3). Museum work, conservation, nature guide work, field biology. In addition to the basic courses are recommended: Plant Taxonomy, Advanced Zoology, Entomology, Special Problems, Geology.

(4). Horticulture, agronomy, landscape art, forestry. For the first two: Plant Physiology, Bacteriology, Entomology, Genetics, considerable Chemistry, Elementary Physics, Structural Geology. For landscape art: Plant Taxonomy, Freehand and Mechanical Drawing, Surveying, Chemistry, Geology, and Economics. For forestry: Plant Taxonomy, Advanced Zoology, Entomology, Surveying.

(5). Medicine, nursing, laboratory technique, public health, and sanitation. Pre-medical requirements are discussed elsewhere. Inasmuch as medicine is highly biological, a liberal election of Embryology, Histology, Neurology, Physiology is recommended. Work in Entomology, Bacteriology and General Botany is recommended in addition to the above for Public Health.

DIVISION V—PHYSICAL SCIENCES

(Departments of Astronomy, Chemistry, Geology, Mathematics and Physics)

The Division of Physical Sciences renders through its freshman and sophomore courses two quite distinct types of educational service:

1. For persons who are not intimately concerned with science or scientific pursuits it offers a general introduction through survey courses to modern scientific method, to the philosophic aspects of science, and to the place of the sciences in the general scheme of human affairs, along with the theoretical and descriptive presentation of the subject-matter. Conspicuous among such courses are: Mathematics A5, Physics A1, Chemistry A1, Astronomy B1 and Geology B1.

2. For those who incline toward more emphasis on the physical sciences during their collegiate years, whether for purposes of teaching, or with a view to engaging in commercial enterprises requiring knowledge of physical science, or because of an interest in scientific study for its own sake, the Division offers excellent opportunities for concentration.

PREREQUISITES for undertaking concentration in Physical Science:

1. Physics and Chemistry: Fundamental in importance is such an understanding of the constitution and value of matter and energy as is ordinarily gained through basic courses in Physics and Chemistry.

2. Mathematics: A practical knowledge of the tools of scientific reasoning acquired in Mathematics is essential. This will mean mathematics courses at least through calculus. It is urged that those planning such work in college complete trigonometry in high school.

3. Foreign Languages: It is highly desirable that the student purposing to concentrate in the Physical Sciences shall acquire a reading knowledge of both French and German. The more this knowledge is gained during the high school years the better.

CONCENTRATION: Each one of the departments grouped in the Division has its own sequence of courses for the student concentrating in its section of the general field; but it also requires supplementary work in related departments. In addition, there are opportunities for concentration in fields that cross departmental lines. The combinations and implications are too markedly individual, however, to permit of a satisfactory general statement; they must be worked out between the student and his adviser.

DIVISION VI—SOCIAL SCIENCES

(Departments of Economics, Education, History, Political Science and Law, and Sociology)

CONCENTRATION IN THE DIVISION. Although emphasis in the program of a student concentrating in the Division is placed on an integrated sequence of studies in one of the social sciences, it is expected that the student will obtain a broad understanding of the content and meaning of the social sciences as a whole. With this in view he will include early in his course at least three of the four basic courses¹ in the Division. He will maintain a "B" average in the social studies, will complete 24 hours in "C" and "D" courses in the Division of which at least 12 must be "D," and will include courses D251 and D252 in the social science of his more intensive study.

FOREIGN LANGUAGE. It is recommended that every student concentrating in the Division of Social Sciences acquire a reading knowledge of French *and* German. Normally by the beginning of the Junior year but not later than the middle of his Senior year, the student is required to file with his Adviser a written certificate of his ability to read French *or* German, issued by a member of the Division who has been designated to examine in those languages.

COMPREHENSIVE EXAMINATION. The work of a candidate concentrating in social sciences culminates in a written comprehensive examination, administered by the Division. This examination consists of two parts: (1) a general examination to reveal the candidate's grasp of the broader aspects of the several social sciences and their interrelations, and (2) a more specialized examination to test his mastery of the particular social science which the candidate has studied intensively. Inasmuch as the purpose of the comprehensive examination is to appraise the candidate's integration of the entire range of social studies included in his undergraduate program, the passing of both parts of this examination will exempt the student from final examinations in social science courses at the end of his Senior year.

The following courses offered by the Department of Education are considered to be part of the work of the Division of Social Sciences:

Introduction to Education; History of Education; Comparative Education.

SUPPLEMENTARY COURSES. In addition, the courses listed below, and other courses approved by the Division, may form a part of a student's program of concentration in the Social Sciences:

Philosophy of the State; History of Philosophy; Social Psychology.

The attention of social science students is called to certain courses available to them, offered by affiliated colleges in Claremont.

DIVISION VII—PHILOSOPHY, PSYCHOLOGY AND RELIGION

A SUGGESTED COURSE during the Lower Division years for those proposing to concentrate in the Division:

¹Economics B5, History A1, Political Science A1, Sociology B21.

Freshman Year

Biology A1
Chemistry A1 or Physics A1
History A1 or Political
Science A1
English A1
Religion A1

Sophomore Year

Zoology B3 or Astronomy B1
Psychology B1 or B3
Economics B1 or Sociology
B21
Philosophy B21 or B23
Religion B

Note: A reading knowledge of French and German is ultimately necessary for persons who undertake advanced graduate work in the field of the division.

CONCENTRATION IN THE DIVISION requires:

1. The completion of the following basic courses:
Philosophy C125 or C127;
Psychology B1 or B3;
Religion C109.
2. The completion of forty hours in the division; eighteen of these hours shall be taken in one of the departments of the division; six of them shall be of D rank.
3. The maintenance of a grade of B or better in divisional courses.
4. The passing of a comprehensive examination covering the entire field of concentration at the close of the senior year.

A SUGGESTED PRE-MEDICAL COURSE

Certain subjects have been designated by the Council on Medical Education of the American Medical Association as unconditional requirements for entrance to Class A medical colleges. Many of the leading medical colleges, however, have requirements well beyond this minimum. Pre-medical students are advised not to attempt to crowd the minimum requirements into two years of college work, but to build, in more leisurely fashion, a broad educational foundation. The outline below indicates a curriculum which meets the requirements for graduation from Pomona College, and, it is believed, the entrance requirements of all medical colleges in the United States.

Freshman Year

	Hours
English (A1).....	8
Chemistry, General (B3 or A1, B2).....	6 or 8
Mathematics (A2 and A4) (Trigonometry is pre- requisite for Physics)	6
German or French.....	6
Elective from Div. VI or VII	6 or 4

Junior Year

Chemistry, Organic (C110)	8
Physics (B2, B4).....	8
Zoology (D113, D114 or D117)	6
Electives from Divisions other than IV and V.....	10

Sophomore Year

	Hours
Chemistry, Analytical (B6, B7)	6
Zoology (B11, B12).....	6
Psychology	6
German or French.....	6
Mathematics or free elective....	6

Senior Year

All elective. A major in either Chemistry or Zoology may be completed. Subjects especially recommended are Philosophy, Sociology, Economics, Language and Literature, and Psychology.

A reading knowledge of both German and French is highly desirable. If one has been taken in High School, it is recommended that the other be taken in college. High School work in Latin, as well as French and German, is recommended for those planning the medical course. High School trigonometry, physics and chemistry are also recommended. For one wishing to concentrate on the chemical phases of the medical sciences, mathematics through calculus should be taken in college. Some of the medical schools are including physical chemistry in their curricula. Breadth of view, culture, and a thorough grounding in the biological and physico-chemical sciences are the objectives of the pre-medical course.

A SUGGESTED PRE-ENGINEERING COURSE

In the belief that the training of a liberal arts college, so essential to men in other professions, is essential to the engineer, Pomona has developed a series of courses to enable its graduates to enter the upper division work of engineering schools and to graduate therefrom in two years. Men during the first two years will take the same course regardless of the field of engineering contemplated.

FRESHMAN YEAR

	Hours
Chemistry B3 or A1 and B2.....	6 or 9
Mathematics B13	6
Mathematics A7 (Engineering Drawing).....	4
Foreign Language	6
Elective	10 or 7

SOPHOMORE YEAR

Economics B1	6
Mathematics C115	6
Mathematics B9 (Engineering Drawing).....	4
Physics B2 and B4.....	10
Foreign Language	6

JUNIOR YEAR

Chemistry B6 ^{1 2 3}	3
Mathematics D120 ^{1 2 3}	3
Astronomy or Geology ¹	6
Economics ¹	6
Physics C111 and D109 ^{2 3}	10
Electives	14 or 16

SENIOR YEAR

Mathematics D121 ^{1 2 3}	6
Physics D120 ³	6
Physics D113 ^{1 2 3} (Analytic Mechanics).....	6
Electives	14 or 20

In addition the six weeks' summer course in surveying at Bluff Lake should be taken by all.

¹To be taken by civil, structural and hydraulic engineers.

²To be taken by aeronautical and mechanical engineers.

³To be taken by electrical engineers.

A SUGGESTED COURSE FOR PROSPECTIVE TEACHERS

The courses in Education in Pomona College are designed to supply the information each intelligent citizen should have concerning one of the most important of our social institutions; they offer also to the prospective teacher a certain amount of pre-professional training.

CREDENTIALS: In California every teacher must have a credential. These certificates giving the right to teach in the state differ considerably one from another: the attainments implied in a credential that permits its holder to teach in the elementary school are not the same as for those which give authority respectively to teach in high school, to manage the physical education activities, or to direct the music program. Hence, it is advantageous for the prospective teacher to decide, as soon as is practicable, the type of teaching he is to pursue.

MUSIC AND THE PHYSICAL EDUCATION CREDENTIALS: Consult the respective departments concerned for the required courses involved in preparation for these credentials. The training leading to recommendation for these credentials only is completed in Pomona College.

ELEMENTARY CREDENTIAL: Collegiate courses should be so distributed that at the end of the four years the candidate will have adequate training in the subjects taught in the elementary school. These include art, music and physical education.

GENERAL SECONDARY CREDENTIAL: The candidate must complete not less than twenty-four hours in a subject commonly taught in high school; at least twelve of these hours must be of upper division rank. Also, he must complete not less than twelve hours in a second subject commonly taught in high school; at least six of these hours must be of upper division rank.

The more technical courses leading to the elementary and the general secondary credentials are offered in Claremont Colleges; persons interested are referred to the announcements of the department of Education of that institution.

A SUGGESTED PROGRAM for the prospective teacher:

Freshman year: Academic courses preparatory to the credential in view.

Sophomore year: Education B3; Psychology B1; further work in the subject-matter to be taught.

Junior year: Education C104; Psychology C107¹; further work in the subject-matter to be taught, or in related fields.

Senior year: A selection from Education D105; Education D125; Psychology D117¹; Education D210; Education D215; Education D217. A rounding out of the subject-matter to be taught.

¹These courses count technically as Education in all matters involving credentials.

COURSES OF INSTRUCTION

DESIGNATION OF COURSES

The letter preceding the number in the designation of a course indicates in general its grade. Elementary courses, designated by A (as English A1) are given in Freshman or Sophomore year; B courses are either those which follow the A course of earlier years or the more advanced beginning courses; C and D courses are advanced courses given to Juniors and Seniors, D courses being the more difficult. The natural sequence of courses is from A to B, B to C, and C to D, and a student may not enter a C or D course without previous work in the same line.

Courses with numbers below 100 are underclass courses; those numbered from 100 to 199 are for Juniors and Seniors; those numbered over 200 are not open to students of less than Senior standing.

Any course may be withdrawn if the enrollment is less than five.

In departments where one-hour courses are offered, two such courses should be completed to secure the counting of hours and credits towards graduation.

When courses in different semesters have the same general number and are connected by a hyphen thus, B1a-B1b, they cover a common subject and the entire sequence should be taken. If, however, they are connected by a comma, thus, B1a, B1b, although the course extends throughout the year, independent credit is given for the work of the first semester and the first course may be followed by some allied subject instead of the next course in the sequence. Entrance to the second semester course is by permission of the instructor.

All courses are three hours each unless otherwise designated.

Roman numerals show the periods of recitations. Two courses with the same Roman numerals cannot be taken contemporaneously unless the numerals are preceded by different letters (as *M* or *W*), showing that the classes meet on different days of the group.

	7:30	8:30	9:55	10:55	1:15	2:15	3:15
<i>MWF</i>	<i>I</i>	<i>III</i>	<i>V</i>	<i>VII</i>	<i>IX</i>	<i>XI</i>	<i>XIII</i>
	7:30	8:30	9:30	10:30	1:15	2:15	3:15
<i>TThS</i>	<i>II</i>	<i>IV</i>	<i>VI</i>	<i>VIII</i>	<i>X</i>	<i>XII</i>	<i>XIV</i>

Hours to be arranged—*A*.

If a letter precedes the numeral, the class meets only on that day of the group.

ART

A fee of \$5 is charged for each hour of credit except in courses B100, C111a, C111b.

A1a-A1b. Design.

BEGGS

A study of the elements of design in primitive art and historic ornament, and their application to various types of original commercial designs. 2 hours. Class, *WF, IX*; laboratory, *WF, XI, XIII, or A*.

A2a-A2b. Drawing.

BEGGS

Study of the theory of perspective with practice in out-door sketching. Still-life in charcoal and work in pen-and-ink and color are included. 2 hours. Class, *TTh, XII*; laboratory, *TTh, X, XIV, or A*.

B11a-B11b. Drawing and Design.

BEGGS

Drawing from still-life and cast combined with work in water-color and tempera. Pictorial composition is studied as applied to illustration in black and white and color. 2 hours. Class, *WF, XI*; laboratory, *WF, IX, XIII or A*.

B100. Art Interpretation.

BEGGS

A course for students wishing to know how art applies in everyday life. A study of art in the home and community. Each semester. 2 hours. *WF, VII*.

C111a, C111b. History of Art.

PIJOAN

A general history of art from the stone-age to the present. The art of primitive peoples and the Orient, the Classic, Early Christian, Byzantine and Medieval periods will be studied in the first semester, and the Renaissance, Baroque, Neo-Classic, Romantic, Realistic and Contemporary art in the second. *III*.

C120a-C120b. Advanced Drawing and Design.

BEGGS

A course in still-life painting in oil. The composition of easel pictures and mural decorations is considered. Problems involving the theory of the design of mosaic, stained-glass and fresco are also offered. 2 hours. Class, *TTh, X*; laboratory, *XII, XIV or A*.

ASTRONOMY

B1a-B1b. General Astronomy.

BRACKETT and WHITNEY

A non-mathematical course dealing with the general facts of astronomy, including regular observations at the Observatory; designed for students who have only elementary preparation in physics or chemistry and mathematics. Classroom, two hours a week; lecture and observatory, amounting to one period a week. Laboratory fee, \$3.00 per semester. *VII*.

C101-C102. Astronomy and Cosmogony.

BRACKETT and WHITNEY

A special course in the essentials of the subject, designed for students who have a working knowledge of analytic geometry and calculus and of the more important principles of physical science, including, in the second semester, a study of recent theories of cosmogony as compared with historical hypotheses. Classroom, two hours a week; lecture and observatory amounting to one period a week. Laboratory fee, \$3.00 per semester. *IV.*

C103a. The Sun.

BRACKETT

A detailed study of the sun and its constitution, the results of contemporaneous work being integrated with the student's own use of the horizontal telescope, spectrograph and spectrohelioscope. Laboratory fee, \$5.00. First semester. *A.*

C103b. Variable Stars and Binaries.

WHITNEY

Systematic observational study of certain variable and binary stars, with construction of light curves, and discussion of their classification and origin. Laboratory fee, \$5.00. Second semester. *VIII.*

D104. Theoretical and Practical Astronomy.

Some phase of theoretical or practical astronomy, such as the determination of time, latitude, and longitude. Classroom, one hour a week; lecture and observatory amounting to two periods a week. First semester. Fee, \$5.00. *A.*

D105. Celestial Mechanics.

Applications of the principles of mechanics to the motions of heavenly bodies, with special problems such as the computation of orbits or the determination of the circumstances of eclipses. Second semester. *A.*

Note: Either the Series D104 and D105 or D106 will be offered each year as demand warrants. Both will not be offered.

D106a-D106b. Astrophysics.

WHITNEY

A practical course in the spectrographic study of the sun and stars. Laboratory fee, \$8.00 per semester.

D230. Investigations in Astronomy. BRACKETT and WHITNEY

Investigation in a particular field such as variable stars or solar physics, or in some phase of astrophysics. Each semester. 1 to 4 hours. May be repeated for credit. *A.*

BIOLOGY

A1a-A1b. General Biology. HILTON, MUNZ and ASSISTANTS

A general course for either those who intend to take further

biological work or those who wish but one year. It may be taken for credit only by students who have had no high school biology, botany or zoology. Class, *TTh, VIII*; laboratory, *MTWTh*, or *F, 1:15-4:10*. Laboratory fee, \$6.00 each.

C105. Bacteriology.

MUNZ

General study of important bacteria, methods of culture and study, and importance in disease and agriculture. Prerequisite: one year of biological work. First semester. Class, *W, I*; laboratory, *WF, 1:15-4:10*. Laboratory fee, \$8.00. Breakage deposit, \$5.00. Alternates with C107. (*Omitted in 1929-1930*).

C107. Genetics.

MUNZ

A non-laboratory course covering modern developments in the study of heredity and evolution and their general application to plant and animal breeding and to eugenics and race questions. Class work will be accompanied by demonstrations, problems and discussions. Prerequisite: one year of biological work. First semester. *I*. Fee, \$3.00. Alternates with Botany C123.

C108. Bionomics.

HILTON

A course in the history of biological progress, including modern problems in evolution, heredity and eugenics. It is open to Juniors or Seniors who have had a year of biological work. May be taken with Zoology D131 for three hours. Second semester. 2 hours. *MW, I*.

BOTANY

B21a-B21b. General Botany.

MUNZ

A general introductory course to the study of plant life, covering the structure and life-processes of plants, and attempting to give a picture of plants as living organisms. A survey of the plant kingdom, giving the steps in the evolution series. Both laboratory and field work. Prerequisite: one year of high school or college laboratory science. Class, *MW, VII*; laboratory, *Th, 1:15-4:10*. Laboratory fee, \$6.00 a semester.

C123. Plant Physiology.

MUNZ

A study of the physics and chemistry of plant-life, discussing the nutrition, life-processes, absorption, conduction, transpiration, photosynthesis, respiration, growth, etc. Important for those students contemplating horticultural work, teaching of biology, and for botany majors. Prerequisite: Botany B21. First semester. *A*. Two class periods and one laboratory. Laboratory fee, \$8.00. Breakage deposit, \$5.00. Alternates with Biology C107. (*Not given in 1929-1930*).

D125a, D125b. Taxonomy.

MUNZ

Study of our local flora and more common cultivated ornamentals. Principles and methods of classification and taxonomic work. Much field work with trips to desert, mountain,

and shore for study of plants in their native conditions. Prerequisite: Botany B21. First semester, Class, *WF, III*; laboratory, *M, 1:15-4:10*. Second semester, Class, *F, III*; laboratory, *MW, 1:15-4:10*. Laboratory fee, \$7.00 each semester. Alternates with D127.

D127a, D127b. Anatomy and Comparative Morphology of Green Plants. MUNZ

The anatomy with special reference to vascular tissues from the evolutionary point of view. Morphology covering life-histories, evolutionary series, and relationships of groups of green plants from algae to seed plants. Prerequisite: Botany B21. Class, *MW, I*; laboratory, *M, 1:15-4:10*. Laboratory fee, \$7.00 a semester. Alternates with D125. (*Omitted in 1929-1930*).

D131. Botanical Problems. MUNZ

Special work, largely individual, and primarily for majors in the department. Each semester. 1 to 3 hours. May be repeated for credit. Permission of instructor necessary for registration. Laboratory fee, \$2.00 per hour of credit.

CHEMISTRY

A1a, A1b. A Survey of Chemical Science. ROBINSON

Intended especially for those who are planning no further work in chemistry, but with Chemistry B2 may serve as preparation for advanced courses. The course covers in a historical and non-mathematical way the fundamental concepts of the nature of matter, the principles of chemical behavior and the place of chemistry in human affairs. No laboratory. *V*. Fee, \$2.00 each semester to defray expenses of lecture demonstrations.

B2. Experimental Inorganic Chemistry ROBINSON, GROSS

To accompany or to follow Chemistry A1b; intended, in lieu of Chemistry B3, for those who are planning to take more advanced courses in chemistry. Laboratory work similar to that of B3a, b, and also assigned problems and studies of chemical behavior. Either semester. 2 hours. Laboratory, *TTh, 1:15-4:10*. Laboratory fee, \$10.00.

B3a, B3b. Inorganic and Elementary Theoretical Chemistry.

GROSS

Prerequisites: Entrance Chemistry, or consent of instructor. Descriptive chemistry according to the general plan of the periodic system, including also the development of modern ideas of electrons, atoms, molecules, and ions, and such theoretical aspects of physical chemistry as the gas laws and the behavior of matter considered on a partially mathematical basis. Class, *TTh, II*. Laboratory, *T or Th, 1:15-4:10*. Laboratory fee, \$6.00 each semester.

B6. Qualitative Analysis.

TRUESDAIL

Prerequisite: Chemistry B3 or A1 and B2. A lecture and laboratory course designed to give the student a knowledge of the fundamentals underlying the properties and uses of the metallic elements, as well as the systematic qualitative analysis of the more common metals and acids. First semester. Class, *Th, VIII*; laboratory, two periods; *TTh, 1:15-4:10*. Laboratory fee, \$10.00.

B7. Elementary Quantitative Analysis.

TRUESDAIL

To be preceded by Chemistry B6. Designed to give the student training in some of the fundamental and simpler methods of both volumetric and gravimetric analysis. Class period used to discuss the principles and problems involved in quantitative analysis. Second semester. Class, *T, VIII*; laboratory, two periods; *WF, 1:15-4:10* or *A*. Laboratory fee, \$10.00.

C110a, C110b. Organic Chemistry.

ROBINSON

Prerequisite: Chemistry B3b, or A1 and B2. A study of the compounds of carbon, including, in the first semester, a survey of the principal classes of carbon compounds and their characteristics; and in the second semester, a study of synthetic methods and of the atomic forces at work in the reactions of the carbon compounds. Numerous biological and industrial applications are cited. Class, *VII*; laboratory, *1:15-4:10, T, W*, 4 or 5 hours. Laboratory fee, 1 hour, \$6.00; 2 hours, \$10.00 each semester.

C111. Advanced Quantitative Analysis.

TRUESDAIL

A continuation of B 7, designed to give the student a more comprehensive course in the theory and practice of volumetric and gravimetric analysis. First semester. Class, *Th, VIII*; laboratory, two periods; *WF, 1:15-4:10*, or *A*. Laboratory fee, \$10.00.

D113. Special Quantitative Methods.

GROSS

Prerequisite: Chemistry C111. First semester. Three laboratory periods, *A*, from which time is taken for conferences. Laboratory fee, \$12.00.

D114. Advanced Organic Chemistry.

ROBINSON

Prerequisite: Chemistry C110b. Devised to give additional experience and insight into the laboratory methods of organic chemistry, either preparative or analytical. Laboratory and conference, *A*. Each semester, 2 or 3 hours. May be repeated for credit. Laboratory fee, \$5.00 per hour.

D115a, D115b. Biological Chemistry.

TRUESDAIL

Prerequisites: Chemistry B7 and C110. Lectures and reports on the chemistry of carbohydrates, fats, proteins, body tissues, blood, secretions, putrefaction and the physiological processes such as digestion, absorption and assimilation of food, general enzyme action, metabolism and the fundamental principles of

nutrition. The laboratory work consists of qualitative and quantitative experiments on the lecture material. Class, *WF, III*; laboratory, *F, 1:15-4:10*. Laboratory fee, \$6.00 each.

D119a, D119b. Physical Chemistry. GROSS

Prerequisites: Differential and Integral Calculus, and a C course in either chemistry or physics. A general review of elementary physical chemistry, followed by an intensive study of thermodynamics and its application to certain topics in the study of solutions, ionized solutes, equilibria, phase rule, thermochemistry and electrochemistry. Class, *TTh, VIII*; laboratory, *1:15-4:10, T*. Laboratory fee, \$8.00 each.

D121a, D121b. Chemistry Conference. THE STAFF

A study of chemical history and modern chemical literature, with frequent oral and written reports. One hour each. Class, *A*.

D201a, D201b. Research in Chemistry. THE STAFF

This course is included in the chemistry curriculum to give the advanced student the opportunity to become acquainted with investigational methods used in the field of chemistry. Problems in Physical, Analytical, Organic, or Biological Chemistry may be undertaken with the consent of the instructor under whom the student wishes to work. 2-6 hours. *A*. Each semester. Fees, \$3.00 per hour.

ECONOMICS

A5a-A5b. Accounting. NESS

A study in theory and method, developing from the balance sheet the fundamental principles underlying alike the construction and interpretation of financial records. *MF, VII and T or W, 1:15-4:05*. Laboratory fee, \$3.00 each.

B11a-B11b. Elements of Economics. DUNCAN

A basic course in the general principles of Economics. Required for students expecting to emphasize the study of Economics, and prerequisite for upper division courses in Economics. Two sections. *I, III*.

B29. Statistical Methods. NESS

Theory and method, including averages, frequency distribution, dispersion, correlation, and graphical methods. Second semester. *S, II*. Laboratory periods, *Th and F, 1:15-4:10*. Laboratory fee, \$4.00.

C105. Money and Banking. NESS

History and principles of Money and Banking, with particular attention to recent developments in the field of banking. First semester. *VI*.

- C106. Public Finance.** **DUNCAN**
Public expenditures, public revenues, public debt, and financial administration, with special attention to the theory and practice of taxation. Second semester. *IV*.
- C108. Problems of Labor.** **KIRK**
A study of labor organizations; labor legislation; scientific management; methods of promoting industrial peace. Second semester. *V*.
- C109. Transportation Problems.** **NESS**
An historical and analytical study of transportation principles and problems, with particular reference to railway transportation in the United States. Second semester. *VI*.
- C110. Corporation Finance.** **DUNCAN**
Principles underlying the promotion, financial structure and control, failure and reorganization of corporate enterprise, including some study of cooperative organizations. It is recommended that a course in accounting precede this course. First semester. *IV*.
- D111. Investments.** **NESS**
A study of the fields of speculation and investment; problems of investment and analysis. Economics C110 prerequisite. Second semester. *VIII*.
- D115. Principles of International Trade.** **NESS**
Principles and structure underlying international economic relations. Economics C105 prerequisite. First semester. *I*.
- D116. Agricultural Economics.** **BURGESS**
A study of the application of economic principles to certain problems of agriculture, such as land tenure, transport, labor, marketing and prices. Second semester. *II*.
- D117. Economic Problems of the Orient.** **DUNCAN**
A study of the economic, social and political problems of the Far East with special reference to current conditions in China. Enrollment restricted to those expecting to concentrate in Social Science and to others by special consent of instructor. First semester. *VII*.
- D119. Monopolies and Trusts.** **BURGESS**
A study of the economic and legal status of monopolies. First semester. *VI*.
- D252. Economic Theory.** **DUNCAN**
The special topics studied vary from year to year, and will include critical analysis of underlying economic theory and its de-

velopment. The course aims to synthesize the student's work in Economics and culminates in the comprehensive examination required for those whose field of intensive study is Economics. Second semester. 3 hours. *A*.

EDUCATION

B3. Introduction to Education. DOUGLASS

A course designed for those who desire an understanding of the American school system. The outstanding problems of present-day education are examined and certain approaches to a solution of these problems are discussed. Prerequisite for Education C104, D105, D215, D217. Each semester. First semester, *V*; second semester, *IV*.

C104. History of Education. NICHOLL

The development of educational theory and practice from the Greek period to the present. First semester. *VII*.

D105. Comparative Education. NICHOLL

A study of the educational organization, administration, curricula and social purposes of the school systems of other countries. Second semester. *VII*.

D210. Practice Teaching in Music and Physical Education.

Exercises in actual teaching under direction, regular conferences with the supervisor being a feature of the work. The course is open to those completing credential requirements during the current year. 4 hours. Each semester. *A*.

D215. Principles of Secondary Education. DOUGLASS

The factors and principles which underlie the theory and practice of secondary education, including the junior high school, the senior high school and the junior college. First semester. *III*.

D217. Problems in Education. DOUGLASS

Stress is placed upon current educational questions and literature. Students may consider individual problems, 2 or 3 hours. Second semester. *A*.

ENGLISH

Writing and Speech are emphasized features of all lower division courses.

A1a-A1b. English: An Introductory Course.

THE DEPARTMENTAL STAFF

The fundamental principles of literary criticism and interpretation together with reading and study of specimens of the more

important literary types; instruction and practice in writing and speech. 4 hours. Prerequisite for all other departmental courses. Men: *WF, III*; section meetings at *IV*. Women: *TTh, IV*; section meetings at *III*.

B4. Shakespeare.

FRAMPTON

A general course, including some consideration of Shakespeare's life and the conditions under which he lived and wrote, the chief stress falling, however, on a study of the greater plays with a view to enabling the student to read Shakespeare with sympathetic appreciation. Second semester. *V*.

B5a, B5b. Nineteenth Century Literature.

LINCOLN and FOWLER

Wide reading in the literature of the period, in poetry and essays especially, with lectures on its significance as an expression and interpretation of general English life. Two sections. *II* and *V*.

B7a, B7b. Types of Drama.

DAVIS

Studies in the great periods of dramatic achievement from the classic Greek to the present day with as extensive reading as time will permit. Offered to men and women in alternation; in 1929-1930 registration is limited to thirty men. *VII*.

B9a, B9b. Types of Prose Fiction.

HARRIS

Studies in the various phases, as tale, romance, novel and short-story, through which fiction writing has passed from medieval times to our own. Offered to men and women in alternation; in 1929-1930 registration is limited to thirty women. *I*.

B11. Character Presentation in Dramatic Literature.

BLAISDELL

The theory and technique of character presentation as found in selected plays. The course looks toward character-interpretation through the actor's art. Permission of the instructor must be secured before registration for this course. Each semester. *IV*.

B21. English Composition.

FOWLER

A general course with emphasis on expository writing. First semester, *VI*.

C102. Chaucer.

LINCOLN

A study of Chaucer as the outstanding narrative and dramatic poet of the transition from the medieval to the modern world. Offered to men and women in alternation; in 1929-1930 registration is limited to women. Second semester. *VII*.

C103a, C103b. Literature of the Eighteenth Century.

MCCULLEY and DAVIS

The neo-classical literature of Dryden, Pope and their con-

temporaries; the periodical essayists; sentimentalism, realism and romanticism; the eighteenth century drama; the beginnings of the English novel; the spread of the romantic movement in England and on the Continent. Permission of the instructor must be secured before registration for this course. *II.*

C105a, C105b. American Literature. LINCOLN

The literature of the United States, with emphasis on its expression of our national characteristics and sentiments. Offered to men and women in alternation; in 1929-1930 registration is limited to men. *VI.*

C107. Contemporary Poetry. LINCOLN

A course in the forms and content of contemporary poetry with directed practice in the writing of verse. First semester. *VII.*

C111. Short-Story Writing. FRAMPTON

Practice in supervised writing of short-stories. Study of contemporary short-stories. First semester. *V.*

C112. The Essay. HARRIS

A writing course with some study of recent essay literature. Second semester. *V.*

D123a, D123b. History of English Drama to 1642. FRAMPTON

Lectures and readings tracing the historical development of English drama from its beginning to its flowering in the work of Shakespeare and his contemporaries; thence through its decline to the closing of the theatres. *VII.*

D125a, D125b. Shakespeare. McCULLEY.

A study of Shakespeare's complete works. *I.*

D127. Literary Criticism. FRAMPTON

An examination of the bases of literary criticism; studies of outstanding modern critics; frequent practice in supervised critical writing. First semester. *T, X and XII, and F, IX.*

D128. Dramatic Writing. _____

Studies in the technique of play construction together with practice in dramatic composition. Prerequisite: English B7 or equivalent. Second semester. (*Omitted in 1929-1930.*)

D215a, D215b. The Development of English Literature. THE DEPARTMENTAL STAFF

Lectures, reading, papers and oral reports directed toward a synthesis on the student's part of his work in the field of literature and allied subjects; the course culminates in the comprehensive final examination required of persons concentrating in

English. Prerequisite: English C103 or an equivalent. Registration for the second semester is conditioned upon a grade of B or better in the first. *M, XI, and W, XI and XIII.*

D218. The Great Victorians. McCULLEY

The "major prophets," Carlyle, Ruskin and Arnold, receive chief emphasis. The work of other eminent Victorians is investigated and discussed in relation to these central figures and to the general social life of the period. Prerequisite: English C103 or an equivalent. Second semester. *VI.*

D230. Creative Writing. FRAMPTON

Supervised practice in all forms of creative writing. Study of matters and fields of literary interest. Second semester. *T, X and XII, and F, IX.*

FRENCH

A1a-A1b. Elementary. JONES, BISSIRI, WAGNER

Stress laid on accurate pronunciation, essentials of grammar, translation of French prose; dictation, conversation and easy composition. Five sections. *II, VI, VII.*

B3a-B3b. French Novel of the Nineteenth Century.

BISSIRI, HUSSON

A study of the prose writers of the nineteenth century. Selections from representative authors; Chateaubriand, Hugo, Balzac, Loti, Sand, Coppee. Composition, summaries and reports in French. Four sections. *I, II, III, IV.*

B4a-B4b. Grammatical Analysis. BISSIRI

An intensive study of grammar with emphasis on idiomatic French, original compositions, conversation, reading of contemporary French. Class conducted largely in French. Prerequisite: French A1 or equivalent. 2 hours. *TTh, VIII.*

C105. Classic Drama. BISSIRI

A study of typical plays by Corneille, Racine and Moliere, with collateral reports in French. Lectures in French. Prerequisite: French B3 or equivalent. Two sections. First semester. *V.*

C106. Seventeenth Century Prose. BISSIRI

Study of Boileau, La Fontaine, La Bruyere, Descartes, Pascal, Bossuet, Fenelon, Mmes. de Sevigne, La Fayette and Maintenon; lectures and collateral study in French upon the age of Louis XIV. This and all following courses conducted in French. Second semester. *V.*

C107a-C107b. French Conversation. BISSIRI

Practical course in French conversation based on modern colloquial usages. Prerequisite: French B3 and B4 or equivalent. 1 hour. *T, X.*

D109. Literature of the Eighteenth Century. JONES

A critical study of the French philosophers of the eighteenth century, with especial attention to Montesquieu, Voltaire and J. J. Rousseau. Collateral readings and reports by members of the class. Prerequisite: French C105 and C106. Required for French major unless D111 is taken. First semester. *IV. (Omitted in 1929-1930).*

D110. Romantic School. JONES

An intensive study of the French poets of the early nineteenth century. Readings from Hugo, Lamartine, A. de Musset, and others. Collateral readings and lectures upon the period. Prerequisite: French C105 and C106. Required for French major unless D112 is taken. Second semester. *IV. (Omitted in 1929-1930).*

D111. Le Moyen Age. JONES

Poetry of the Middle Ages. Les chroniqueurs. Villon. Lectures upon the literary history of the period. Required for French major unless D109 is taken. First semester. *IV.*

D112. La Renaissance. JONES

Ronsard and the Pleiade. Rabelais and Montaigne. Poetry of Marot. Lectures. Required for French major unless D110 is taken. Second semester. *IV.*

D115. French Phonetics. BISSIRI

An advanced course for improving the technique of French expression. First semester. 2 hours. *A.*

GEOLOGY

B1a, B1b. Introductory Geology. WOODFORD

Dynamic, structural and historical geology. Prerequisite: High school chemistry or equivalent. Class, two hours a week; laboratory or field work, one period a week. Class, *WF, I*; laboratory, *W* or *Th, 1:15-4:15*. Laboratory fee, \$3.00 a semester.

B3. Determinative Mineralogy. WOODFORD

Prerequisite: High school chemistry or equivalent. Either semester. Two laboratory periods. 2 hours. *A.* Laboratory fee, \$4.00.

C105. Crystallography. WOODFORD

Must be preceded or accompanied by Geology B3, unless taken upon the written recommendation of the Department of Chemistry or of Physics. First semester 2 hours. *WF, V.*

C110. Petrology. WOODFORD

The study of rocks without the microscope. Prerequisite: Geology B1a, B3 and C105. Second semester. One class and two laboratory periods. *A.* Laboratory fee, \$4.00.

(See Page 43 for continuation of Geology)

GERMAN

A1a-A1b. Elementary German. NEUFELD, WAGNER

The acquirement of a small working vocabulary. Constant ear-training, and as much practice in speaking as time permits. Daily exercises in reading and writing. The essentials of grammar. Etymology. Comment on German life and literature. Three sections. *II, V.*

B3a-B3b. Advanced German. NEUFELD, WAGNER

More advanced German language study through intensive reading and discussion of selected German works, with considerably extended reading in the field of the student's individual interest. Continued practice in German conversation. Some attention to an understanding of the cultural life of Germany, Austria and Switzerland. Prerequisite: German A1 or an equivalent. Two sections. *III, VI.*

C113a-C113b. German Literature and Life. NEUFELD

A survey of German life and thought. Contemporary art and history. Works of general interest such as the Nibelungenlied, the lyrics of the troubadours, the writings of Martin Luther and some of the best modern German since the Reformation. *VIII.*

C109a-C109b. German Literature of the Nineteenth Century. NEUFELD

Rapid reading of typical works from the time of Goethe until the present. Contact established with other European literary movements of the period. Discussion and papers. Prerequisite: German B3 or equivalent. *I.*

One of the following courses, to be elected only with the consent of the instructor, may be offered if there is sufficient demand.

D115. Goethe and His Times. NEUFELD
Either semester. *A.*

D217. Middle High German. NEUFELD
Either semester. *A.*

C107a-C107b. Invertebrate Paleontology. WOODFORD

Prerequisite: Geology B1b; recommended preparation: Zoology B11. Two class and one laboratory periods, first semester; one class and two laboratory periods, second semester. *A.* Laboratory fee, \$6.00 a semester. Given alternate years.

D104. Field Geology. WOODFORD

Prerequisite: Geology B1b, C110. A summer course of three or six weeks. 3 or 6 hours. *A.*

D111-D112. Petrography. WOODFORD

Refraction and double refraction; the optical indicatrix; study of minerals and rocks with the petrographic microscope. Prerequisite: Geology C105. Two class and one laboratory periods, first semester; one class and two laboratory periods, second semester. *A.* Laboratory fee, \$5.00 first semester; \$8.00 second semester. Given alternate years. (*Omitted in 1929-1930*).

D230, D231. Geological Investigation and Research. WOODFORD

3 hours. *A.* Laboratory fee, \$4.00 each.

GREEK

B1a-B1b. Elementary. ROBBINS and ASSISTANT

First lessons; relation to modern Greek and to English scientific vocabulary; selected short passages from Greek literature; Book I of Homer's *Iliad*. *VIII.*

C101a, C101b. Selections from Greek Literature. ROBBINS

Two sequences of readings are offered in alternate years: Herodotus, Plato, Homer, Greek comedy and tragedy, the New Testament. Studies in morphology and syntax are regular features of the work. The course may be repeated for credit in successive years. *IX.*

HISTORY

A1a-A1b. The Development of Western Civilization. PITMAN and COOKE

The evolution of civilization in Europe from antiquity to the present, and its spread throughout the world. Attention is paid to the political, religious, intellectual, and economic forces of change. The aim is to lay a foundation for the understanding of contemporary problems. Normally a prerequisite for advanced courses in history. *I,* Pitman; *II,* Cooke.

B7a-B7b. English History. PITMAN

A survey of the development of the main features of civilization in England and the British Empire. Emphasis is laid upon

the evolution of religious, intellectual, and economic forms as well as the growth of political institutions. Thus the course is largely a study of the cultural heritage of America. First semester, Great Britain to 1660; second semester, Great Britain and the Empire since 1660. *VIII*.

B8a-B8b. The Westward Movement in American History.

COOKE

A study of the process of settling frontier areas in America since the founding of the English colonies and of the influence of frontier environments upon the various aspects of American civilization—political, diplomatic, economic and social. *XI*.

C113a, C113b. Modern European History.

COOKE

Following an introductory survey of the forces operating in the society of the eighteenth century a study is made of the French Revolution and the Napoleonic period. The development of European nations is traced in its political and cultural aspects with emphasis upon international relations, the World War, the League, and problems of reconstruction. First semester to 1878; second semester 1878 to the present. *VII*.

C117a, C117b. The History of the Greeks and Romans.

ROBBINS

Grecian civilization from its establishment until the Roman conquest, followed by a study of Rome from the founding of the Eternal City until the reign of Justinian. *V*.

D119. American Diplomatic History.

COOKE

An examination of American policy in such matters as neutrality and freedom of the seas, fisheries, commercial relations, the Monroe Doctrine, recognition of new governments, expatriation and protection of citizens abroad, immigration, disarmament, arbitration and international association. First semester. *VI*.

D125a-D125b. Economic and Social History of the United States.

PITMAN

A study of agrarian, commercial, and industrial conditions which helped determine the character and importance of the major political and social problems of American colonial and national history. Attention is given to the economic foundations of American imperialism. Lectures, investigation of topics, and reports. *A*.

D131a, D131b. Spanish Civilization.

PIJOAN

A study of the rise of Spanish civilization; the development of its characteristic forms, literary and artistic, social and political; the extension of it to the Hispanic regions overseas. *V*.

D132. Development of Social Classes in the United States.

VOORHIS

A study of the social and economic forces in American life

which have brought about the dominance of various social classes at different periods in the history of the nation; and a consideration of the evolution of the United States from a nation dominated by the presence of a frontier of free land to a nation laboring with the complexities of a highly industrialized civilization. Second semester, *T, VIII; Th.4-6.*

D251-D252. Historiography. PITMAN and COOKE

An examination of the development of historical writing, availability of sources, and the emergence of new methods and viewpoints for the investigation and interpretation of historical phenomena. Lectures, student reports, and discussions. Primarily for students concentrating in history. 2 hours. *A. (Omitted 1929-1930).*

For courses in the history of education, *see* Department of Education; for history of philosophy, *see* Department of Philosophy; for church history, *see* Department of Religion; for history of Art, *see* Department of Art.

ITALIAN

B31a-B31b. Elementary. JONES

Essentials of grammar. Special emphasis upon pronunciation. Composition and dictation. *XI.*

C133. Boccaccio and Petrarch. JONES

Selections from the Decamerone and other works of Boccaccio. Study of the Canzoniere of Petrarch. First semester. *A.*

C134. Dante. JONES

Intensive study of the Inferno, with selections from the Purgatorio and Paradiso. Collateral readings with reports in Italian. Prerequisite: C133 or C135. Second semester. *A.*

D135. I Poeti dei secoli XVIII e XIX. JONES

A study of the foremost Italian poets and dramatists of the last two centuries. Collateral readings and reports in Italian. First semester. *A. (Omitted in 1929-1930).*

D136. Il Cinquecento. JONES

A study of the Italian epics of the sixteenth century. Readings from Bolardo, Ariosto, Tasso and others. Collateral readings and reports in Italian. Prerequisite: C133 or C135. Second semester. *A. (Omitted in 1929-1930).*

LATIN

A1a-A1b. Elementary.

An introductory course in the rudiments of the Latin language

with emphasis upon the relation of Latin to English and the Romanic languages. *VII. (Omitted in 1929-1930).*

A2a-A2b. Cicero, Ovid and Vergil. ROBBINS and ASSISTANT
Cicero, Orations I and IV against Catiline and the Oration for Archias; selected passages from Ovid's *Metamorphoses* and Vergil's *Aeneid*. *VII.*

B3a, B3b. Cicero, Pliny and Horace. ROBBINS
Cicero, *De Senectute*; Pliny, *Selected Letters*; study of the life and times of the late Roman republic and early empire. Horace, *Odes and Epodes*; philosophy, history and mythology as reflected in the poems of Horace; study of the metrics of Horace and the influence of the Greek lyric poets. *VI.*

C105a-C105b. Composition. ROBBINS
Review of Latin grammar; translation of sentences and connected discourse into Latin according to the needs of the class; lectures on word-formation and syntax. This course may be re-elected with credit and is required of students majoring in Latin. *A. 1 hour.*

C107a, C107b. Roman Comedy and Elegy. ROBBINS
Selected plays from Plautus and Terence. Origin and development of the elegy with emphasis upon the poems of Catullus, Tibullus, Propertius and Ovid. *III.*

D109a, D109b. Roman Prose Masters. ROBBINS
Two sequences of readings are offered in alternate years: a, Roman philosophy and satire; b, Roman historical and political antiquities. The course may be repeated for credit in successive years. In 1929-1930, sequence b. *IV.*

MATHEMATICS

A2. Plane Trigonometry. TAYLOR and BERRY
Elements of plane trigonometry with practical problems. Each semester. First semester, *V*; second semester, *VI.*

A4. Algebra. BERRY and TAYLOR
A semester course in second year algebra, designed for those who have studied algebra only one year. First semester, *VI*; second semester, *V*.

A5a-A5b. General Mathematics. BERRY
A non-technical course intended to give the general student an appreciation of mathematics and an understanding of its bearing upon the other subjects of a liberal education. *II.*

B3a, B3b. Algebra.**RUSSELL**

Fundamental operations and quadratic equations; complex numbers; ratio, proportion and variation; binomial theorem; elementary functions; series; logarithms; theory of equations. Prerequisite: Two years of high school algebra. *V*.

SB11. Surveying.**TAYLOR**

Use and adjustment of surveying instruments. Methods of making and mapping surveys for various purposes. Given during summer session at the Bluff Lake Camp of Pomona College. Prerequisite: Plane trigonometry. 6 hours.

B13a, B13b. Analytical Geometry and Calculus.**RUSSELL and BERRY**

An elementary course in the principles of coordinate geometry and introduction to differential calculus. Designed to follow Mathematics A2, A5 or B3. *VI, I*.

C115a-C115b. Differential and Integral Calculus. **RUSSELL**

A continuation of Mathematics B13a, B13b. *IV*.

D119. Theory of Equations.**RUSSELL**

Theory and solution of higher algebraic equations, employing determinants, elimination and linear transformations. First semester. *II*.

D120. Differential Equations.**RUSSELL**

A general course in the theory and solution of differential equations. Second semester. *II*.

D121a-D121b. Higher Analysis.**TAYLOR**

An introduction to the realm of higher mathematics, including the intensive study of some particular subject, such as the theory of numbers of real functions, designed to develop independence and power in mathematical reasoning. (*Omitted in 1929-1930*).

D127a-D127b. Projective Geometry.**TAYLOR**

A study of the principles of projective geometry with special attention to the foundations of geometry. *III*.

GRAPHICS**A7a, A7b. Engineering Drawing.****TAYLOR**

A beginning course in mechanical drawing and descriptive geometry. Includes lettering, use of instruments, orthographic projection, and the making and interpreting of working drawings. 1 or 2 hours. *TTh or F. 1:15-4:10*. Fee, \$2.00 per hour.

B9a, B9b. Engineering Drawing.**TAYLOR**

A more advanced course in mechanical drawing and descriptive geometry. Treats of orthographic and perspective projections, machine and structural details. Prerequisite: Engineering A2 or its equivalent. 1 or 2 hours. *TTh or F. 1:15-4:10.* Fee, \$2.00 per hour.

C112a, C112b. Engineering Drawing.**TAYLOR**

Design of cams, gears, machine parts and simple trusses. 2 hours. *TTh or F. 1:15-4:10.* Fee, \$2.00 per hour.

MILITARY SCIENCE

The College maintains an Infantry Unit, Senior Division, of the Reserve Officers' Training Corps. The four-year course is divided into the basic course, which consists of the first two years, and the advanced course, which consists of the last two years. Enrollment in either course is voluntary but, when a student has elected either the basic or advanced course, completion of such course is a prerequisite for graduation.

The basic course is open to all physically fit male students who are American citizens. The advanced course is open to selected students who have completed the basic course or its equivalent, and who enter into an agreement to attend one summer instruction camp for a period of six weeks. Students who have completed two full academic years in a junior R.O.T.C. unit will normally be admitted to the second year of the basic course. Students who have completed three full years in a junior R.O.T.C. unit may be admitted to the advanced course in their freshman year.

Students in the basic course are furnished uniforms without charge. Students in the advanced course receive an allowance from the Government amounting to about nine dollars per month for two college years and receive nominal pay during the period of attendance at summer camps. Upon completion of the advanced course, students may be commissioned as second lieutenants in the Officers' Reserve Corps.

A1a-A1b. First Year, Basic Course.**SANFORD**

National Defense Act and the R.O.T.C.; military courtesy and discipline; drill and command; rifle marksmanship; scouting and patrolling. 1½ hours. Class, *M, III.* Drill, *M, 1:15-3:05.*

B3a-B3b. Second Year, Basic Course.**BACON**

Automatic rifle; musketry; drill and command; scouting and patrolling; combat principles of the rifle squad. 1½ hours. Class, *Th, VIII or F, IX.* Drill, *M, 1:15-3:05.*

C105a-C105b. First Year, Advanced Course.**BACON**

Map reading and military sketching; interpretation of aerial

photographs; drill and command; machine guns; 37mm gun and trench mortar; combat principles of the rifle section and platoon. 3½ hours. *III or VII and M, 1:15-3:05.*

D107a-D107b. Second Year, Advanced Course. SANFORD

Infantry weapons; military law and Officers' Reserve Corps regulations; military history and policy; military correspondence and administration; field engineering and camouflage; drill and command to qualify the student to perform the duties of platoon and company commanders; combat principles of the rifle and machine gun companies and howitzer platoon. 3½ hours. *II or IV and M, 1:15-3:05.*

MUSIC

THEORY AND APPRECIATION

A1a-A1b. Elementary Harmony. ALLEN

A study of intervals, scales, tonal magnetism, primary triads, dominant seventh and ninth chords, and all non-chordal tones. Harmonization of melodies. A2 is recommended. Prerequisite: Elementary knowledge of the pianoforte. Two sections, *I, II*

B3a-B3b. History and Appreciation. ALLEN

A course tracing the development of music from ancient times to the present; biographical sketches of famous composers with a description of their principal works. Recitals, to aid in appreciation, are given frequently. Victrola and Duo Art. 2 hours. *MF, XI.*

B5a-B5b. Advanced Harmony. ALLEN

Secondary harmonies. Modulation and chromatically altered chords. Extensive keyboard drill. Creative work is encouraged from the beginning. Harmonization conducted on a melodic basis. Prerequisite: Music A1 or equivalent. *VII.*

C107a-C107b. Counterpoint. ALLEN

A study of Simple Counterpoint in the five species with an aim to develop technique in voice leading. Two and three part inventions. Creative work in the simple forms of Free Composition is undertaken during the course. Prerequisite: Music B5. *VI.*

C113a-C113b. Orchestration. CLOKEY

A study of orchestral instruments, their capabilities and limitations, and their use singly, and in groups; arranging of compositions for Symphony. "American" and "Theatre" Orchestra; the study of scores; the theory and practice of conducting. This course is especially designed to meet the needs of a student desiring the State Certificate. Prerequisite: Music B5. *XIII.*

D108a, D108b. Free Composition.

ALLEN

Advanced original work in the shorter free styles followed by the Sonata form. Prerequisite: Music C107. *A*.

D219. Public School Music Methods.

COLEMAN

Selection, presentation and interpretation of the song. Methods of developing sight-singing and other technical problems. A brief study of child psychology. Teaching plans with a bibliography of material. First semester. 2 hours. *A*.

APPLIED MUSIC

I. Class Instruction (No Special Fees).

A2a, A2b. Ear Training and Sight-Singing.

A study of scale tones and their relationships together with a development of rhythmic appreciation. Melodic and harmonic dictation with a view to discriminative listening and proficiency in sight-reading. Recommended for all harmony students. Two sections. 3 hours' recitation. 2 hours' credit. *V* and *IX*. The section at *IX* is open only to students who have had one year of harmony.

B7a, B7b. Choral Singing.

LYMAN

The study and production of choral music, especial attention being given to diction, phrasing, content of the works dealt with, and an understanding of musicianship as applied to choral singing. The Class will be organized as the College Choir and as such will sing and practice on Mondays, Wednesdays and Fridays from 9:30 to 10:10 and at an additional hour to be arranged. 1 hour. The course may be repeated for credit.

B9a-B9b. Ensemble Playing.

UNIACKE

The principles of ensemble playing approached through practice, with emphasis on accuracy in technic, intonation, rhythm and tone quality; practice in conducting from complete and condensed conductor's scores. Three hours of attendance weekly; one hour credit. The course may be repeated for credit. *A*.

D110. Church Music.

CLOKEY

The history and traditions of the various liturgical and non-liturgical church services of today; the best means of interpreting them. Registration limited to advanced students in organ and voice. Two lecture-laboratory periods per week. One hour credit. Second semester. *A*.

II. Individual Instruction (Special fees charged).

The student in applied music under individual instruction will be enrolled for credit toward the Bachelor of Arts degree only upon the written recommendation of the Chairman of the Examin-

ing Committee and the Head of the Department, and upon the subsequent favorable action of the Classification Committee. This recommendation is based upon the degree of ability and advancement shown in Proficiency Tests. In addition the work in applied music must be accompanied or preceded by Harmony A1. A second year or more of credit is possible when the applied course is accompanied or preceded by Harmony B5. A minimum of two half-hour lessons weekly is required for which two hours' credit is allowed. No college credit is given for work below "B" (Sophomore) grade. Not more than 12 hours' credit in applied music may be counted toward the Bachelor of Arts degree unless the student is able to present a total of 8 hours of "D" (Senior) grade work in any subject. In this case 16 hours' credit may be allowed. Proficiency tests are required only of students desiring credit toward the Bachelor of Arts degree. For further details *see* Music Bulletin.

Voice	LYMAN, BABCOCK
Organ	CLOKEY
Piano	OLIVE, WEST
Violin and Ensemble	UNIACKE
Flute	PLOWE
Violoncello	WEIRICK
Wind Instruments	FREDERICK

PHILOSOPHY

B21. Introduction to Logic. IREDELL

A study of the elements of deductive and inductive reasoning with special emphasis upon the problems of definition, the nature and use of scientific hypotheses, probability, and deductive and inductive fallacies. Each semester. *VI.*

B23. Ethics. DENISON

A study of the nature of morality, the problem of human freedom, the standard of judgment of right and wrong and of social and individual judgments on moral questions. An examination of conscience and reason. First semester. *V.*

C120. The Philosophy of Art. DENISON

A study of the nature of art, of its bases in human nature and its value as a means of interpretation of the universe together with an examination of the meaning of beauty. Second semester. *III.*

C125a, C125b. History of Philosophy. IREDELL

A study of the main currents of thought from the earliest Greek thinkers through modern philosophic thought. The course is designed to be a general and cultural introduction to philosophy through history. *VII.*

C127. Introduction to Philosophy. DENISON and IREDELL

An introductory consideration of the meaning and method of philosophy, an examination of the thought problems which emerge in astronomy, geology, physics, biology and psychology and a review of some of the main philosophic estimates of life. Second semester. Two sections. *V*.

C133. Philosophy of Evolution. DENISON

A study of the nature of the evolutionary process, with examination of Darwin's idea of evolution, and later theories, in their scientific and metaphysical aspects, such as mechanism, teleology, creative evolution, and the place of man and value in the order. First semester. *VI*.

D116. Locke, Berkeley and Hume. IREDELL

A critical and intensive study of the major works of the above English philosophers with especial reference to their influence on later thought. First semester. *VIII*. (*Omitted 1929-1930*).

D117. Theory of the Self in Contemporary Philosophy.

IREDELL

A critical survey of contemporary views about the nature of the self, considering such problems as the definition of the term, the nature of self-knowledge, and the place of selves in reality. First semester. *VIII*.

D122. Philosophy Since 1900. DENISON

A study of contemporary philosophic thought through some of the main modern thinkers with special reference to the dominant ideas of the civilization of today. First semester. *IV*.

D124. Philosophy of Religion. DENISON

An examination of the human aspects and the metaphysical foundations of religion, the relation between scientific and religious conceptions of God, the world and immortality. Second semester. *III*. (*Omitted in 1929-1930*).

D132. Philosophy of State and Law. DENISON

A philosophical study of the nature and function of the state and its basis in human nature, together with an examination of the philosophies of democracy, of the economic order of internationalism and of law. Background in Social Psychology, Sociology, Economics or Political Science required. Second semester. *IV*.

PHYSICAL EDUCATION

MEN AND WOMEN

A student may count toward graduation not more than one hour per semester in "sports" and "activities" during his Lower

Division years, and not more than one-half hour per semester during his Upper Division years.

C126. Health Education. KELLEY

A brief survey of the psychological basis for teaching health. Practical problems in leadership to establish interest and self-direction in health habits. Correlation of total health teaching program. First semester. 2 hours. *MW, III.*

C127. Playground Theory and Activities. HEATH

A study of the organization of the school and the public play group, the types of leadership, and types of games best suited for elementary use. A study of the more complex games, the organization of tournaments, and the arrangement of schedules. A study of school and public programs of play, and the construction of school and public play grounds. 2 hours. First semester, *WF, IX.*

C128. Nature and Function of Play. KELLEY

The biological interpretation of play and the function of play in growth, development and social adjustment. Methods of leadership and organization of play activities to bring out moral habits, attitudes and judgments. Second semester. 2 hours. *MW, IX.*

C130a-C130b. Kinesiology. BIGELOW and VAN GELDER

Body structure considered in relation to problems of physical education; the mechanisms of joint movement and their application in selected activities. First semester, Van Gelder. Class, *S, IV*; laboratory, *TTh, 1:15-4:10*. Second semester, Bigelow, *IV.*

A special section of C130b for qualified seniors will be offered by Miss Bigelow in the first semester of 1929-1930. Class, *MW, III*; laboratory, *F, 1:15-4:10*.

D131. Theory and Application of Remedial Exercises.

BIGELOW and STREHLE

Study and treatment of functional and structural abnormal anatomical conditions. Laboratory work including prescription of special exercises, methods of examination, and massage. Second semester *MW, III*, and laboratory *A*. 3 hours.

D133. History and Principles of Physical Education. NIXON

Second semester. *VIII.*

MEN

A physical examination is given to all entering students, together with a series of physical efficiency tests. Upon the basis of these tests and examinations each student is assigned for the first semester of his freshman year to courses in sports, gymnastics or corrective exercises, according to his physical needs; for the

second semester he is given work in either Self Defense or Gymnastic Exercises. In the first semester of the sophomore year the Swimming Test must be met; all who fail to pass it will be assigned to classes in Swimming.

A1a-A1b. Sports, Gymnastics or Corrective Exercises.

NIXON, HEATH, STREHLE, MERRITT

Required, Freshman year. $\frac{1}{2}$ to $1\frac{1}{2}$ hours. *A.*

A2a-A2b. Gymnastic Exercises.

STREHLE

Required of Freshmen not taking military. $\frac{1}{2}$ hour. *A.*

A5. Hygiene.

NIXON

Each semester. 2 hours. *TTh, VI.*

B3a-B3b. Sports or Gymnastics.

NIXON, HEATH, STREHLE, MERRITT

Required, Sophomore year. $\frac{1}{2}$ to $1\frac{1}{2}$ hours. *A.*

B4a-B4b. Sports.

NIXON, HEATH, STREHLE, MERRITT

Required of Sophomores not taking military. Sophomore year. $\frac{1}{2}$ hour. *A.*

C105a-C105b. Sports. NIXON, HEATH, STREHLE, MERRITT

Required, Junior year. $\frac{1}{2}$ to $1\frac{1}{2}$ hours. *A.*

C107a-C107b. Sports. NIXON, HEATH, STREHLE, MERRITT

Required, Senior year. $\frac{1}{2}$ to $1\frac{1}{2}$ hours. *A.*

D219a-D219b. Teaching of Physical Education Activities.

HEATH, STREHLE, MERRITT

This course is devoted mainly to methods in coaching and supervising athletics. 2 hours. *A.*

WOMEN

A medical and physical examination is given all entering students with subsequent posture tests. Physical activities are allowed or prescribed as the result of these examinations. Gymnastics, Natural Dancing or Remedial is required for the first semester of the Freshman or Sophomore year. The same program with the addition of Games and Stunts may be elected the next year. Students may have freedom of election in sports in so far as medical and physical examinations warrant, but must include during the Freshman and Sophomore years one individual sport, one team or group sport and one season of either clogging, folk, or natural dancing.

A5. General Hygiene.

KELLEY

2 hours. Each semester. *TTh, VI.*

A11a-A11b. Gymnastics. VAN GELDER, BIGELOW, KELLEY
Required, Freshman year. $\frac{1}{2}$ hour. *MW, VII or XIII.*

A12a-A12b. Sports and Dancing.
KELLEY, BIGELOW, VAN GELDER
Required, Freshman year. $\frac{1}{2}$ to 1 hour. *A.*

B13a-B13b. Gymnastics. VAN GELDER, BIGELOW, KELLEY
Required, Sophomore year. $\frac{1}{2}$ hour. *TTh, VIII or XIV.*

B14a-B14b. Sports and Dancing. BIGELOW, VAN GELDER
Required, Sophomore year. $\frac{1}{2}$ to 1 hour. *A.*

C115a-C115b. Sports and Dancing BIGELOW, VAN GELDER
Required, Junior year. $\frac{1}{2}$ to 1½ hours. *A.*

C117a-C117b. Sports and Dancing. BIGELOW, VAN GELDER
Required, Senior year. $\frac{1}{2}$ to 1½ hours. *A.*

C119a-C119b. Methods in Coaching and Supervising
Sports. KELLEY, BIGELOW, VAN GELDER
1 hour. *F, XI.*

D219. Theory of Teaching Physical Education Activities.

KELLEY

The special organization and technique of teaching physical education activities. First semester. 2 hours. *A.*

PHYSICS

A1a-A1b. Introduction to Physical Science.

TILESTON and HITCHCOCK

A non-mathematical course intended for those who wish to obtain a knowledge of the facts and theories of physics, with their practical application to modern life. The lectures will be illustrated by numerous experimental demonstrations and the subject will be developed from the basis of the electron structure of matter. *M and F, V; Th, X.* Fee, \$5.00 each.

B2a-B2b. General Physics. TILESTON and HITCHCOCK

A study of the phenomena and laws of mechanics, wave motion, sound, heat, magnetism, electricity and light. This course is designed to furnish a working knowledge of the basic principles of physics and is planned especially for those students who expect to continue their technical studies in physics, chemistry, engineering or medicine. Prerequisite: Trigonometry. *I.*

B4a-B4b. Physical Measurements. TILESTON

Quantitative laboratory work in the subjects indicated in

Course B2a-B2b. Must accompany B2a-B2b. *W* and *Th.* 1:15-4:15. 1 or 2 hours. Fee, \$3.00 each hour.

C111a-C111b. Electricity and Magnetism. TILESTON

A course of advanced work in theoretical electricity and magnetism, a study of the fundamental laws underlying resistance, self and mutual inductance, and capacity in both direct and alternating current circuits. Prerequisite: Calculus and Physics B2a-B2b, B4a-B4b. 3 hours. *A.*

D109a-D109b. Electrical Measurements. TILESTON

Laboratory in electrical and electromagnetic measurements; including the calibration of electrical measuring instruments, measurement of magnetization, resistance, inductance and capacity. Opportunity will be given for work in pyrometry, photometry and thermionics. Prerequisite: Physics C111a-C111b preceding or accompanying this course. 1 or 2 hours. *A.* Fee, \$4.00 each hour.

D113a, D113b. Analytic Mechanics. TAYLOR

A study of force and motion with special reference to engineering problems and structures. Prerequisite: a knowledge of calculus, *VII.*

D120. Problems for Investigation TILESTON and HITCHCOCK

For majors in the department. May be repeated for credit. Each semester. 1 to 3 hours. *A.* Fee, \$1.00 to \$8.00.

POLITICAL SCIENCE AND LAW

INTRODUCTORY COURSES

A1a-A1b. The Foundations of Government. STORY

The genesis and nature of political control in society; its functions and technique in relation to groups and to individuals; government as manifested in human behavior and political structure; the fundamental problems of relationship, organization, and administration which arise whenever the exercise of political control is attempted. The basic course in Political Science. Registration is limited to lower division students. 2 hours. *WF, XI*, with a third hour at the pleasure of the instructor. *A.*

B3a, B3b. Contemporary Governments. SAIT

The character, institutional forms, and political practice of the principal contemporary foreign governments with special attention to English government. First semester. American government including a study of the principles and problems of American national, state and municipal polity. Second semester. *IV.*

ADVANCED COURSES

Prerequisite: Political Science, A1, B3, or the consent of the instructor.

C101. Principles of Government. STORY

An examination of the current working hypotheses derived from man's experience in government; together with an attempt to discover the assumptions and premises which are the background of the principles examined. Registration limited to advanced students who have not had Political Science A1a. 2 hours. First semester. *VII*, with a third hour at the pleasure of the instructor.

C103. Municipal Problems. STORY

Survey of modern experience in the organization and administration of urban communities. Analysis and causal explanation applied to selected problems of American municipal government, with special attention to conditions in California cities. First semester. *III*.

C104. Political Institutions. SAIT

Consideration of the more important institutions of popular government and of the efforts to adapt them to increasingly complex conditions. Second semester. *VIII*.

C105. Introduction to Law. BURGESS

The development of American law and legal institutions with some analysis of the rights and liabilities arising from the more common legal relationships. First semester. *IV*.

C108. Problems of International Relations. SAIT

The formulation and control of foreign policy in a democracy; the treaty-making power; contemporary problems arising from competitive national interests including the control of economic imperialism; the "outlawry of war"; and international organization. First semester. *II*.

D101. Public Opinion. STORY

The origin and nature of individual and group attitudes toward public policy; the scope and function of individual and group opinion in relation to public affairs; the modes and agencies affecting the formulation and expression of public opinion and available for making it effective in law and policy. Second semester. *III*.

D111. Constitutional Law. BURGESS

An examination of the Constitution of the United States and the decisions of the Supreme Court upon questions arising thereunder. Second semester. *IV*.

D118. International Law.

SAIT

The nature, sources and development of international law; its function in the international community; the rights and duties of states; pacific and belligerent procedure for the protection of rights; the League of Nations and the Permanent Court of International Justice. Second semester. *II*.

D251, D252. Survey and Inquiry.

STORY

The bibliographical resources of the field; survey of the methodology of investigating political phenomena, including the historical method, the critique of law and the case method, and the techniques suggested by sociology, psychology, and statistics; reviews of important literature. Required of all students concentrating in Political Science. Open to seniors who are concentrating in the division of social science. 2-4 hours. *A*.

PSYCHOLOGY

B1 or B3 is prerequisite to all further courses in the department.

B1. Elements of Psychology.

EYRE, HAWTHORNE

The fundamental facts and laws of the mind. Principles of sensation, perception, memory, thought, feeling, emotion, instinct and will. The relation of mental processes to the nervous system and to action. Each semester. First semester, Eyre, *V*; Hawthorne, *III*; second semester, Eyre, *V*; Hawthorne, *VI*.

B3a-B3b. Elements of Psychology.

WILLIAMS

A more comprehensive course than B1, including classroom experiments and demonstration in addition to text book, reference books and lectures. *IV*.

B8. Applications of Psychology.

WILLIAMS

A critical study of the fundamental principles underlying all applied psychology together with their application in various fields. Second semester, Williams, *III*.

C106. Problems of Psychological Research.

WILLIAMS

The mysterious phenomena of the mind presented in the light of scientific psychology. The subjects considered include hyperesthesia, automatisms, illusions and hallucinations, hypnotism, contemporary occultism and spiritualism. First semester. *VII*.

C107. Educational Psychology.

HAWTHORNE

Practical applications of psychology to education. The inherited nature of the learner; principal features of the learning process; principles of educational discipline; methods of mental measurement. Each semester. First semester, *VIII*; second semester, *V*.

- C112. Social Psychology.** HAWTHORNE
Mental processes underlying social order and progress; the individual as the social unit; collective forms of behavior. First semester. *IV*.
- C116. Comparative and Genetic Psychology.** HAWTHORNE
An intensive study of the methods used and the results obtained in the fields of animals and infant psychology. Second semester. *VII*.
- C118. Experimental Psychology.** WILLIAMS
A laboratory course in psychology accompanied by lectures and discussions of the principles of scientific method used in psychological investigations. First semester. Class, *TTh, VIII*; laboratory, *W, 1:15-4:10*. Laboratory fee, \$2.00.
- D109. Advanced Psychology.** WILLIAMS
A study of the various systematic points of view in contemporary psychology, principally those of structuralism, functionalism, behaviorism and mentalism. First semester. *V*.
- D117. The Nature and Measurement of Intelligence.** WILLIAMS
A study of the principles and methods of intelligence testing with special emphasis upon the methods of giving the Stanford and Herring Revisions of the Binet Tests. Second semester. *VIII*.
- D125. Mental and Physical Growth.** EYRE
A study of the child's development, mentally, physically and morally. First semester. *IV*.
- D224. Abnormal Psychology.** EYRE
The principles which constitute the normal mind. Functional types of mental disorder, and their causes; measures for their recognition and prevention. Second semester. *VII*.
- D240. Investigation of Psychological Problems.** WILLIAMS
A study of certain psychological problems. The topics change from year to year. 2 hours. Second semester, *A*.

PUBLIC ADDRESS

B32, B33, B35 and C131 will be conducted by Mr. Ross the First Semester, by Mr. Scott the Second Semester.

- A1a-A1b. English: An Introductory Course.** SCOTT
(In cooperation with the Department of English)

The fundamental principles of literary criticism and interpretation together with reading and study of specimens of the more

important literary types; instruction and practice in writing and speech. 4 hours. Prerequisite for all other departmental courses. Men: *WF, III*; section meetings at *IV*. Women: *TTh, IV*; section meeting at *III*.

B32a-B32b. Public Address SCOTT and ROSS

Exercises in voice development and platform deportment. Training in analysis of subjects, selection and arrangement of material, psychological adaptation of material and treatment to specific audiences. 2 hours. *MW, V*.

B33a-B33b. Principles of Reading SCOTT and ROSS

Study of the technique of effective oral interpretation of literature. Application of this technique in the reading of a varied selection of literary types. 2 hours. *TTh, VI*.

B35a, B35b. Argumentation and Debate SCOTT and ROSS

Study of the principles of argumentation and practical application of these principles in class debates. Debate subjects for the year analyzed and debated. 2 hours. *A*.

C131a-C131b. Advanced Public Address SCOTT and ROSS

Training in the construction and delivery of formal addresses. Prerequisite: Public Address B32 or equivalent. 2 hours. *WF, VII*.

C134. Reading of Dramatic Literature SCOTT

The intensive study of a limited number of standard plays, with emphasis on dramatic values in character and plot. Interpretative reading of these plays in class. Recital programs before the class. Prerequisite: Public Address B33 or equivalent. 2 hours. Second semester. *TTh, VIII*.

RELIGION

A1. Orientation in Religion BROOKS

A study of the influence of modern thought in the interpretation of religion and of the contribution of religion to civilization. 2 hours. Each semester. *VI*.

B3a, B3b. The Contribution of the Hebrews to Religion

BROOKS

2 hours. *TTh, VIII*.

B6. Introduction to New Testament HAND

A careful study of such questions as date, authenticity, authorship, composition, integrity, purpose and contents of the documents which comprise the New Testament. First semester. 2 hours. *TTh, XII*. (*Omitted in 1929-1930*).

B7. The Teachings of Jesus HAND

Special emphasis is laid on Jesus' conception of the Kingdom

of Heaven, his revelation of God and his doctrine concerning his own person and his claims on the fealty of men. Second semester. 2 hours. *TTh, XII. (Omitted in 1929-1930).*

B8. The Evolution of the English Version. HAND

A study of the various texts and versions by which the Bible has come to be a literary possession of the English-speaking race. First semester. 2 hours. *TTh, XII.*

B9. The First Interpreters of Jesus. HAND

A study of the teachings of Paul and the general epistles as they have modified and interpreted Christianity. Second semester. 2 hours. *TTh, XII.*

C109a, C109b. The Religious World. BROOKS

This course surveys the origin and growth of religious experience, the characteristics of a fully developed religion, the rise of modern religious ideas, and the place of religion in social reconstruction. *III.*

C125a, C125b. History of Religions. _____

A consideration of the nature of religion as exemplified in the essential facts of early religions, followed by a somewhat detailed study of existing religious systems, Christian and non-Christian, their great personalities, their chief teachings and influences. *(Omitted in 1929-1930).*

D201a, D201b. Problems of Religion. BROOKS

Questions arising from the interrelations of religion with science and ethics. *V.*

SOCIOLOGY

B21a-B21b. Elements of Sociology. KIRK

The social population; social forces; social processes; social products; sociological principles. Two sections. *IV and VI.*

C125. The Control of Poverty. KIRK

A study of poverty and dependency, their relief and prevention. First semester. *(Omitted in 1929-1930).*

C127. Criminology. KIRK

The nature and evolution of crime; causes of crime; criminal procedure; origins and evolution of punishment and treatment; the prevention of delinquency. First semester. *V.*

C128. Social Aspects of Child Welfare. KIRK

(Omitted in 1929-1930).

D251. Advanced Studies in Sociology. KIRK

Research in social problems and agencies. Individual or group

investigation in such fields as social hygiene, recreation, poverty, labor problems, juvenile courts, immigration, crime, the family. First semester. *A*.

D252. Social Theory.

KIRK

Class discussion based upon standard and current works in the field. Book reviews. Second semester. *A*.

SPANISH

A21a-A21b. Elementary.

CROWELL

Essentials of grammar and pronunciation. Dictation, reading from easy modern texts. *VI*.

B23a-B23b. Intermediate. Modern Spanish Readings.

CROWELL

A course intended to acquaint the student with various literary forms, including the novel, drama, poetry, short-story, and essay. Prerequisite: Spanish A21 or equivalent. *V*.

B24a-B24b. Intermediate. Composition and Conversation.

CROWELL

Translation of moderately difficult English into Spanish; free composition; dictation; conversation, on assigned topics or extempore, with especial stress on the acquisition of a correct pronunciation and intonation. Prerequisite: Spanish A21 or equivalent. Two hours. *TTh, XII*.

C103. The Theater of the Nineteenth Century.

HUSSON

Study of the works of such dramatists as Moratín, Martín de la Rosa, Duque de Rivas, Gutiérrez, Hartzenbusch, López de Ayala, Bretón de los Herreros, Tamayo y Baus, Echegaray, and others. Required of all majors in Spanish. *VIII*.

C105. The Novel of the Nineteenth Century.

HUSSON

Study of certain of the works of Fernán, Caballero, Pedro de Alarcón, Valera, Pereda, Galdós, Pardo-Bazán, Valdés, and Blasco Ibañez. Required of all majors in Spanish. (*Omitted in 1929-1930*).

C127a-C127b. Spanish Composition and Conversation.

HUSSON

Intensive drill in written and oral expression. Prerequisite: Spanish B23. *IV*.

D113a, D113b. Literature of the "Siglo de Oro"

CROWELL

Cervantes: his life, works and times. The "Quijote" and several of the "Novelas Ejemplares" will be studied in class. Outside readings and reports assigned from time to time. Required of all majors in Spanish. *II*.

- D115. Literature of the "Siglo de Oro." CROWELL
The Theater: especially the works of Lope, Tirso, Ruiz de Alarcón, and Calderón. Required of all majors in Spanish. (*Omitted in 1929-1930*).

ZOOLOGY

- B3a-B3b. The Human Body. GILCHRIST

A course in the structure and function of the human body. Students may enter the course either semester, but must attend both semesters for credit. Class periods, *MF, I*; laboratory, *Th, 1:15-4:10*. Laboratory fee, \$6.00 each.

- B11, B12. General Zoology. HILTON

A general course which deals with the classification, general habits and distribution of animals. The first semester considers the invertebrates, in the second attention is given to the comparative structures of back-boned animals. Prerequisite: Biology A1, or Zoology B3 or equivalent of one of these. Class, *TTh, II*; laboratory, *T or W, 1:15-4:10*. Laboratory fee, \$6.00 each.

- C110a, C110b. Functional Zoology. GILCHRIST

A study of living animals, both in field and laboratory, with emphasis on the experimental method in modern biology. The first semester deals with internal and external life factors, stressing the relation of animals to their surroundings; the second semester considers such problems as heredity, development, and the regulation of form. Prerequisites: College Biology or Zoology, and College Chemistry. Lectures, *TTh, II*. Laboratory, *T, 1:15-4:10*. Laboratory fee, \$6.00 each semester.

- C118. Entomology. HILTON

A general course in the structure and classification of insects. Each student makes his own collection for identification and study. Prerequisite: Zoology B11. Second semester. Class period, *T, VIII*; laboratory, *W and Th, 1:15-4:10*. Laboratory fee, \$6.00.

- D113. Histology. HILTON

The microscopic anatomy of the tissues and organs especially of vertebrates. Some attention is given to methods. Prerequisite: Zoology B3 or Zoology B11, B12. First semester. Class, *T, IV*. Laboratory by appointment. One class, two laboratory periods. Laboratory fee, \$8.00.

- D114. Neurology. HILTON

A general consideration of the structure and functions of the nervous system and sense organs chiefly of vertebrates. Prerequisite: Zoology D113. Second semester. Class *T, IV*. Laboratory by appointment. One class, two laboratory periods. Laboratory fee, \$6.00.

D117a, D117b. Embryology.

GILCHRIST

The first semester deals with maturation, fertilization and early development. The second semester is concerned with the formation of organs. Prerequisite: Zoology B3 or B11 and B12. Class, *A*; laboratory, *MW*, 1:15-4:10. Laboratory fee, \$8.00 each.

D131. Zoological Literature.

HILTON

Reviews of important contributions in all fields of recent Zoological literature. Open to Juniors and Seniors. Second semester. 1 hour. *F, I*.

D135. Zoological Problems.

HILTON, GILCHRIST

This course is for undergraduates who are prepared to undertake special work in general Zoology, Physiology, Entomology, Anatomy or Embryology. Such problems may be with local insects or other animals or they may be of a general nature dealing with life functions and structures. Either semester. 2 to 3 hours. *A*. May be repeated for credit. Laboratory fee, \$2.00 per hour.



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